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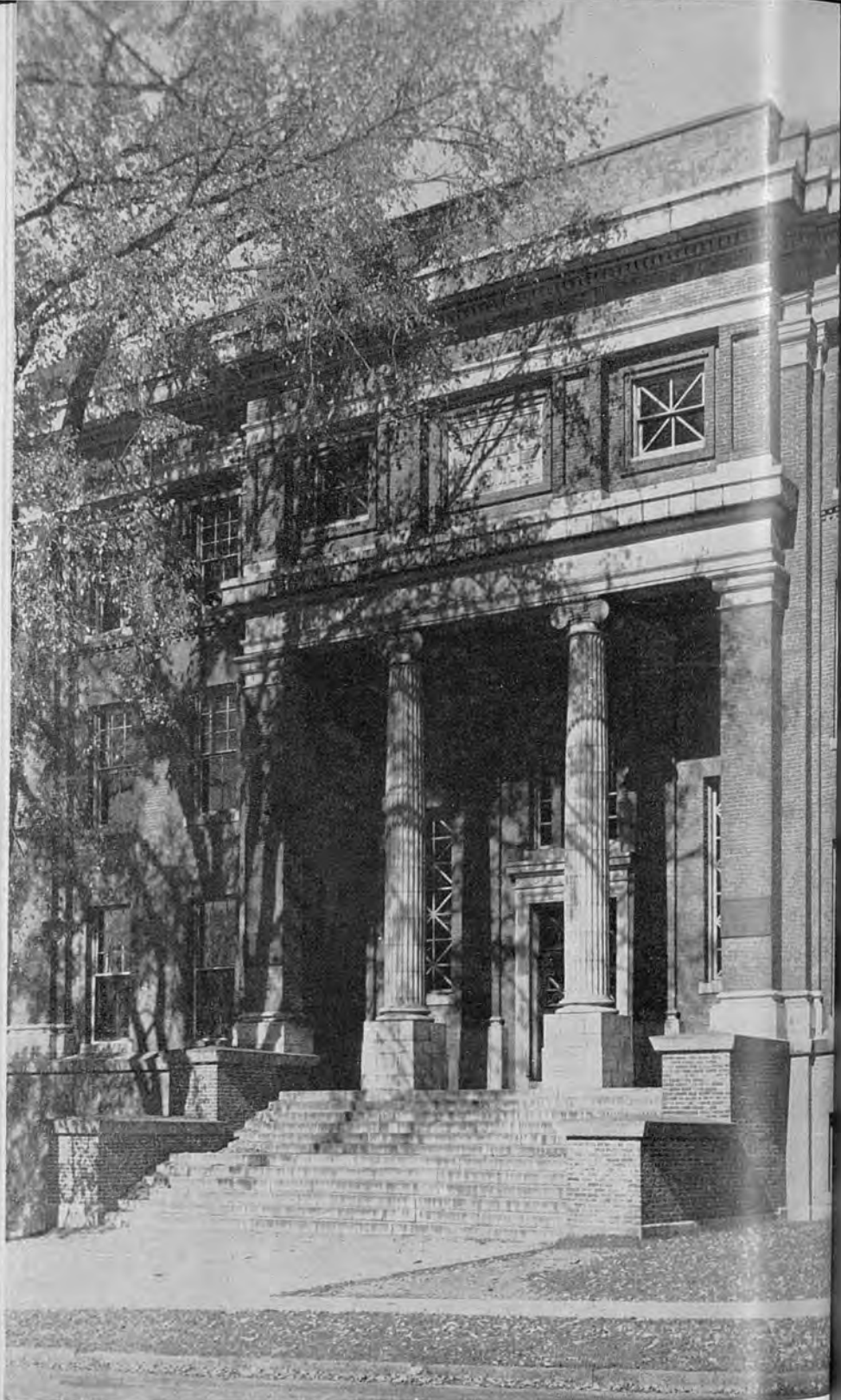
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THE MEDICAL COLLEGE

BULLETIN OF THE

UNIVERSITY OF VERMONT

AND STATE AGRICULTURAL COLLEGE

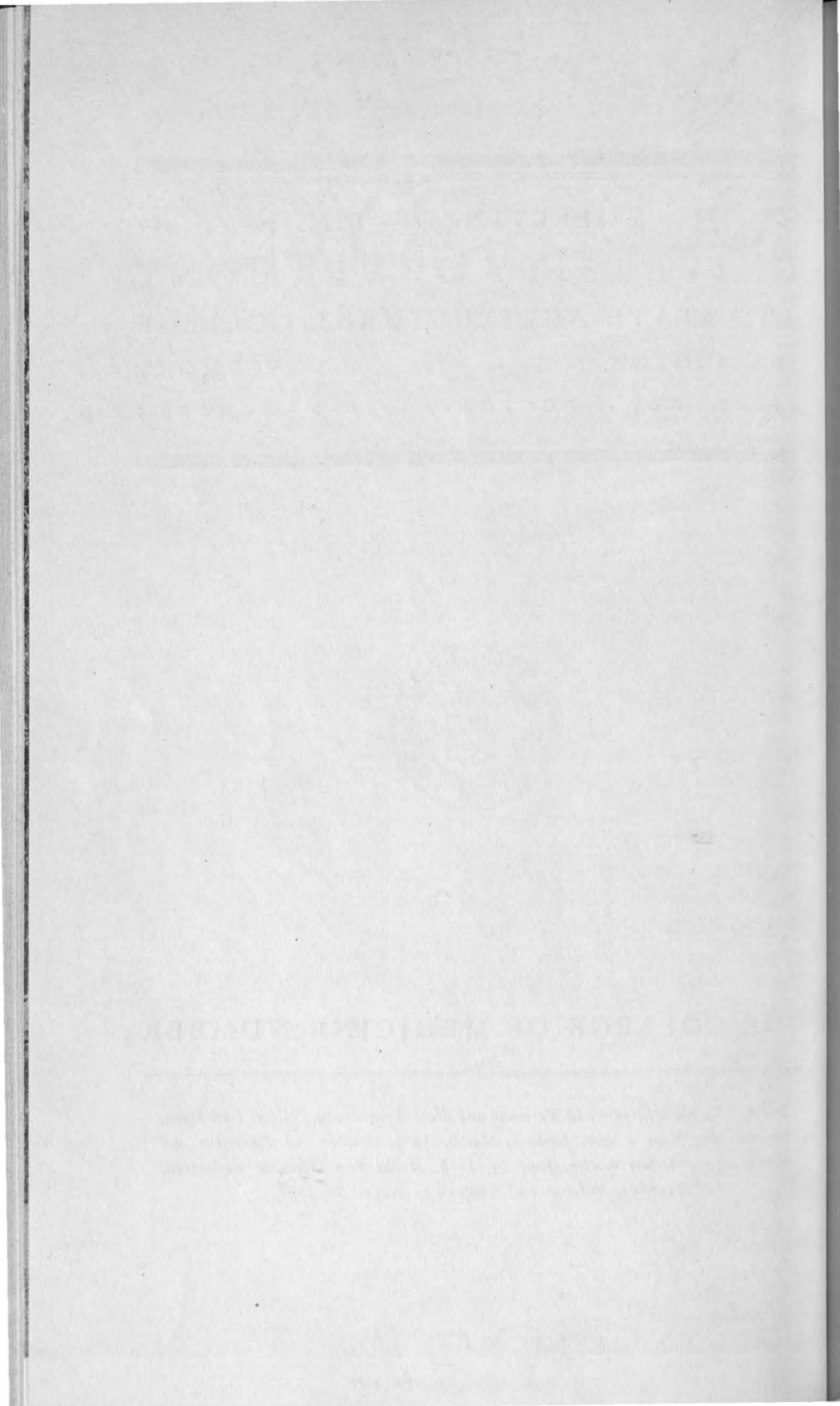
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CALENDAR

1948

- July 3, Saturday.* Enrollment of senior class and Convocation.
July 6, Tuesday. Hospital work for seniors begins.
September 8, Wednesday. Examinations for advancement in course.
September 17, Friday. Convocation.
September 18, Saturday. Enrollment of the three lower classes.
September 20, Monday. Regular Exercises begin.
November 24, Wednesday, 11:50 a.m. to November 28, Sunday. Thanksgiving Recess.
December 19, Sunday, to January 2, Sunday. Christmas Recess.

1949

- January 3, Monday.* Class work resumed.
January 24-February 4. Midyear examinations.
February 7, Monday. Payment of fees for second semester; second semester begins.
April 10, Sunday, to April 17, Sunday. Spring vacation.
May 2, Monday. Founder's Day.
May 30, Monday. Memorial Day.
June 6-17. Final examinations.
June 20, Monday. Graduation.

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ADMINISTRATION

THE BOARD OF TRUSTEES

The University of Vermont and State Agricultural College

JOHN SCHOFF MILLIS, B.S., M.S., PH.D., LL.D., President	} Ex-Officio
<i>His Excellency</i>	
ERNEST WILLIAM GIBSON, A.B., LL.D., Governor	

On the Part of the University of Vermont

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1944	LYMAN ALLEN, A.B., M.D.	Burlington, Vt.	} 1944 to 1950
1944	HENRY TRUMAN WAY, PH.B.	Burlington, Vt.	
1944	JOHN STRATTON WRIGHT, A.B.	University Club, New York City	
1946	CHARLES FRANKLIN BRANCH, M.D.	40 East Erie St., Chicago, Ill.	} 1946 to 1952
1946	WILLIAM MURRAY LOCKWOOD, PH.B.	Burlington, Vt.	
1946	JOHN EMERSON LOVELY, B.S.	Springfield, Vt.	
1948	RAY WILLISTON COLLINS, B.S.	Colchester, Vt.	} 1948 to 1954
1948	ELIAS LYMAN, M.A.	Bristol, Vt.	
1948	REV. ROBERT F. JOYCE, PH.B.	Rutland, Vt.	

On the Part of the Vermont Agricultural College

1941	SMITH SEELEY REYNOLDS	Middlebury, Vt.	} 1943 to 1949
1943	CARROLL LEANDER COBURN, B.S.	E. Montpelier, Vt.	
1941	ASA SCHOONMACHER BLOOMER, PH.B.	W. Rutland, Vt.	
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1945	NORTON BARBER, A.B.	Bennington, Vt.	
1947	FRANCIS WILLIAM BILLADO	Rutland, Vt.	} 1947 to 1953
1947	CARLETON GIBSON HOWE, B.S.	Dorset, Vt.	
1947	FREDERICK PLYMPTON SMITH, A.B., LL.B.	Burlington, Vt.	

STANDING COMMITTEES

- Admissions:* The Dean*, Professors Jordan, Pearson, Pierce and French.
- Advancement:* Drs. Pierce*, Amidon, Cunningham, Dreyer, Durfee, Gallagher, Mackay, Newhall, Pearson and Sichel.
- Advisory:* Drs. French (1951), Cunningham (1951), Gallagher (1950), Durfee (1950), Pearson (1949), Soule (1949).
- Correlation Conference:* Drs. Amidon*, Dunihue, Gallagher, Mackay, Pearson, Pierce, Robertson and Sichel.
- Curriculum for Undergraduate Instruction:* Drs. Amidon*, Dreyer, Gallagher, Mackay, Pearson and Pierce.
- Intern:* Drs. Mackay*, Dreyer, Newhall, and Upton.
- Library:* Drs. Pierce*, Bell, Dunihue, T. Harwood, and Sichel.
- Postgraduate Instruction:* Drs. Mackay*, Amidon, Durfee, Flag and Rees.
- Research:* Drs. Dunihue*, Donaghy, Pearson, Pierce, Raab and Stultz.
- Senior Comprehensive:* Drs. Amidon*, Chittick, Durfee, Mackay and Pearson.
- Student Activities:* Dean*, Drs. Durfee, Gallagher, Robertson, Sichel and Soule.

* Chairman of Committee.

COLLEGE OF MEDICINE

FACULTY AND OTHER OFFICERS

ADMINISTRATIVE OFFICERS

- JOHN SCHOFF MILLIS.....*President of the University*
B.S., University of Chicago, 1924; M.S., 1927; Ph.D., 1931; LL.D., Middlebury, 1942.
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Ph.B., Lafayette, 1909; M.P.H., Harvard, 1915; M.D., Harvard, 1920.
- CHESTER ALBERT NEWHALL.....*Secretary of the Faculty, Associate*
A.B., North-Western College, 1924; *Professor of Anatomy*
M.D., University of Vermont, 1928.

PROFESSORS EMERITI

- BENJAMIN DYER ADAMS.....*Assistant Professor Emeritus of Surgery*
M.D., University of Vermont, 1908.
- LYMAN ALLEN.....*Professor Emeritus of Surgery*
A.B., University of Vermont, 1893; M.D., 1896.
- CLARENCE HENRY BEECHER.....*Professor Emeritus of Medicine*
M.D., University of Vermont, 1900.
- THOMAS STEPHEN BROWN.....*Professor Emeritus of Anatomy*
M.D., University of Vermont, 1904.
- ERNEST HIRAM BUTTLES.....*Professor Emeritus of Pathology*
A.B., University of Vermont, 1901; M.D., 1908.
- CHARLES FRANCIS DALTON.....*Professor Emeritus of Public Health*
M.D., University of Vermont, 1903.
- FRED KINNEY JACKSON.....*Professor Emeritus of Physiology*
A.B., University of Vermont, 1897; M.D., 1899.
- CHARLES KIMBALL JOHNSON.....*Professor Emeritus of Pediatrics*
M.D., University of Vermont, 1899.
- DAVID MARVIN.....*Professor Emeritus of Pharmacology*
M.D., University of Vermont, 1900.
- CHARLES PERKINS MOAT...*Assistant Professor Emeritus of Public Health*
B.S., Massachusetts Institute of Technology, 1896.
- EDWARD JAMES ROGERS.....*Assistant Professor Emeritus of*
B.S., The Citadel, 1896; M.D., South Carolina, 1908; *Clinical Medicine*
M.D., Columbia, 1912.
- GEORGE MILLAR SABIN.....*Professor Emeritus of Clinical Surgery*
B.S., University of Vermont, 1896; M.D., 1900.
- EMMUS GEORGE TWITCHELL...*Professor Emeritus of Ophthalmology,*
A.B., Queen's University, Canada, 1902; *Otolaryngology and Rhinology*
M.D., C.M., 1906.
- CHARLES FLAGG WHITNEY.....*Professor Emeritus of Biochemistry*
B.S., University of Vermont, 1897; *and Toxicology*
M.D., 1903; M.S., 1904.

PROFESSORS

- HOVEY JORDAN.....*Professor of Histology and Embryology*
Ph.B., University of Vermont, 1913; M.S., 1914; A.M., Harvard, 1916.
- OLIVER NEWELL EASTMAN.....*Professor of Gynecology*
M.D., University of Vermont, 1908.
- HERBERT ASHLEY DUFEE.....*Professor of Obstetrics*
A.B., University of Vermont, 1917; M.D., 1920.
- ARTHUR BRADLEY SOULE, JR.....*Professor of Radiology*
A.B., University of Vermont, 1925; M.D., 1928.
- HAROLD BARNARD PIERCE.....*Professor of Biochemistry*
B.S., Massachusetts State College, 1917; M.S., Pennsylvania State College, 1921;
Ph.D., University of Rochester, 1928.
- ALBERT GEORGE MACKAY.....*Professor of Surgery*
B.S., University of Vermont, 1929; M.D., 1932.
- BJARNE PEARSON.....*Professor of Pathology*
B.S., University of Minnesota, 1927;
M.B., 1929; M.D., 1930; M.S. (Med.), 1932.
- FERDINAND JACOB MORRIS SICHEL.....*Professor of Physiology*
B.Sc., McGill, 1928; Sc.M., New York University, 1930; Ph.D., 1934.
- NICHOLAS BERNARD DREYER.....*Professor of Pharmacology*
B.A., Victoria College, 1914; B.A., Oxford, 1922; M.A., 1925; M.R.C.S.; L.R.C.P.
- ELLSWORTH LYMAN AMIDON.....*Professor of Medicine*
B.S., Tufts College, 1927; M.D., University of Vermont, 1932;
M.S. (Med.), University of Pennsylvania, 1938.
- WILHELM RAAB.....*Professor of Experimental Medicine*
M.D., University of Vienna, 1920; M.D., German University of Prague, 1926.
- RUPERT ADDISON CHITTICK.....*Professor of Psychiatry*
B.S., University of Nebraska, 1923; M.A., 1924; M.D., Harvard Medical School, 1929.
- WILLIAM EUSTIS BROWN.....*Professor of Preventive Medicine*
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- WALFORD TUPPER REES.....*Professor of Clinical Surgery*
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A.B., Western Reserve University, 1929;
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ASSOCIATE PROFESSORS

- JOHN ABAJIAN, JR.....*Associate Professor of Anesthesia*
M.D., New York Medical College, 1937.

- JOHN FRYE BELL.....Associate Professor of Orthopedic Surgery
A.B., Yale, 1931; M.D., Harvard, 1935.
- ROY EDWARD CORLEY.....Associate Professor of Pediatrics
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A.B., Wabash College, 1929; M.S., New York University, 1931; Embryology
Ph.D., 1934.
- WINTHROP MAILLOT FLAGG.....Associate Professor of Urology
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- OSCAR SYLVANDER PETERSON, JR. *Assistant Professor of Radiology*
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VISITING STAFF

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FELLOWS

- RICHARD WALKER AMIDON.....*Fellow in Medicine*
B.S., University of Vermont, 1941;
M.D., 1943.
- WILLARD FERGUSON ANGEN, LT. COL., M.C., U.S.A. *Fellow in Pathology*
B.S., Rutgers, 1933; M.D., Rochester, 1937.
- JOHN HARDESTY BLAND.....*Fellow in Experimental Medicine*
A.B., Earlham College, 1939;
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- GEORGE HENRY BRAY.....*Fellow in Pathology*
M.D., University of Vermont, 1947.
- ROBERT NOLAN CAIN.....*Fellow in Surgery*
B.S., University of Vermont 1943;
M.D., 1945.
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M.D., College of Physicians and Surgeons, 1942.
- GINO ALDO DENTE.....*Fellow in Anesthesia*
M.D., University of Vermont, 1941.
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M.D., University of Vermont, 1936.
- CARLETON RAYMOND HAINES.....*Fellow in Surgery*
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- DONALD HOLDEN HARWOOD.....*Fellow in Anesthesia*
B.S., University of Vermont, 1942;
M.D., 1944.
- DONALD WALTER HUMPHREYS.....*Fellow in Radiology*
B.S., University of Vermont, 1944;
M.D., 1947.
- CHARLES WILLIAM JONES.....*Fellow in Pathology*
A.B., Middlebury, 1941;
M.D., University of Vermont, 1945.
- JOHN WEAVER KING.....*Fellow in Medicine*
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M.S., 1937; Ph.D., Yale, 1941; M.D., 1944.
- PAUL KINGSTON LARNER.....*Fellow in Urology*
B.S., Holy Cross College, 1941; M.D., University of Vermont, 1944.
- ARSEN MELKONIAN.....*Fellow in Pathology*
A.B., Cornell, 1940;
M.D., Long Island College of Medicine, 1943.
- HENRI LOUIS PACHE.....*Fellow in Surgery*
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- HAROLD GORDON PAGE.....*Fellow in Surgery*
B.S., University of Vermont, 1940;
M.D., 1945.

- EDWARD JOSEPH SENNETT.....*Fellow in Radiology*
Ph.B., University of Vermont, 1939; M.D., 1943.
- WILLIAM IRELAND SHEA.....*Fellow in Surgery*
AB., Holy Cross College, 1936;
M.D., University of Vermont, 1940.
- ROBERT PEASE SMITH.....*Fellow in Medicine*
A.B., Princeton, 1939;
M.D., Harvard, 1943.
- STEPHEN DAVID SMITH.....*Fellow in Pediatrics*
B.S., University of Georgia, 1942;
M.D., Duke, 1945.
- DONALD WILLIAM SAMPSON STIFF.....*Fellow in Radiology*
A.B., Park College, 1944; M.D., Boston University, 1945.
- HENRY THOMAS TULIP.....*Fellow in Urology*
B.S., University of Vermont, 1944;
M.D., 1947.
- FLETCHER HOWARD WHITE.....*Fellow in Urology*
M.D., University of Vermont, 1938.
- FRANK EDWARD WOODRUFF.....*Fellow in Medicine*
A.B., Bowdoin College, 1939; M.D., 1943.

RESEARCH ASSOCIATES

- JOHN HAROLD BROWE.....*Research Associate in Medicine*
A.B., University of Vermont, 1937; M.D., 1940.
- REGINALD FREDERICK KRAUSE.....*Research Associate in Biochemistry*
A.B., West Virginia University, 1937; M.S., 1939;
Ph.D., University of Rochester, 1942.
- SUSAN BREWSTER MERROW.....*Research Associate in Biochemistry*
B.S., Simmons, 1939;
M.Ed., Boston University, 1944.

ASSISTANTS

- MRS. CONCETTA V. ALBERGHINI.....*Research Assistant in*
B.S., University of Vermont, 1948. *Biochemistry*
- ANN RUTH BAKER.....*Assistant in Biochemistry*
- MRS. CAROL ROSE BURRITT.....*Research Assistant in Anatomy*
B.S., Tufts, 1944.
- NANCY JOAN CANTOR.....*Research Assistant in Physiology*
A.B., Pembroke, 1948.
- OLIVE GRETA FERGUSON.....*Research Assistant in Biochemistry*
- WILDA ROMAYNE GIGEE.....*Research Assistant in Experimental Medicine*
A.B., Alfred University, 1939.
- WILLIAM HENRY HEININGER.....*Assistant in Medicine*
M.D., University of Vermont, 1939.

- ROBERT JOHN HUBBARD.....*Assistant in Pathology*
B.S., St. John's, 1939; M.D., Long Island College of Medicine, 1943.
- JACQUELINE MCCORMICK.....*Research Assistant in Pharmacology*
- JOHN HENRY MCCREA.....*Assistant in Medicine*
B.S., University of Vermont, 1935; M.D., 1938.
- BARBARA ALICE MOORE.....*Assistant in Biochemistry*
- PINCUS PEYSER.....*Research Assistant in Experimental Medicine*
A.B., Yeshiva College, 1945.
- MRS. EMILY FLANAGAN RICE.....*Assistant in Biochemistry*
B.S., St. Louis University, 1946.
- LEGRAND HENDRY THOMAS.....*Assistant in Pathology*
B.S., University of Vermont, 1944; M.D., 1946.

SPECIAL LECTURER

- AARON HINMAN GROUT.....*Lecturer in Medical Jurisprudence*
Ph.B., University of Vermont, 1901.

LIBRARIAN

- VIRGINIA MARY ZINGSHEIM, B.S., *Librarian, Medical Library*
28 Hickok Place

MEDICAL PHOTOGRAPHY

- FRANCIS CHARLES MALLORY, *Medical Photographer* 86 Caroline Street

TECHNICIANS

- HENRY ALBARELLI, *Technician in training in Pathology* 157 Pine Street
- JOHN CHARLES BOLDOSSEY, *Laboratory Assistant in Department of Pathology* Shelburne, Vt.
- WILLIAM GEORGE BOLDOSSEY, *Technician in training in Pathology* Shelburne, Vt.
- DALLAS RICHARD BOUSHEY, *Laboratory Assistant in Department of Anatomy* 11 White Place, S. Burlington
- MRS. ELLA CLARK, B.S., *Laboratory Aide in Anatomy and Pathology* 57 Trailer Park
- MRS. BLANCHE DAY, *Laboratory Assistant in Department of Bacteriology and Clinical Pathology* 8 N. Williams Street
- EDWARD JOSEPH DELEGE, *Technician in Department of Biochemistry* 9 LeClair Ave., Winooski
- JOSEPH LOUIS GAGNON, *Technician in Department of Physiology* 43 Fletcher Place
- MRS. ANNE H. KENNISON, *Assistant in Technology (Pathology)*

- WILLIAM STEPHEN KENNY, *Technician in Animal House*
76 N. Union Street
- PAUL EMILE LAHAIE, *Technician in Department of Pathology*
30 Chase Street
- CLEMENT JOSEPH LECLAIR, *Laboratory Assistant in Pharmacology*
Winooski
- LEDA MYERS, *Technician in Department of Bacteriology and
Clinical Pathology*
210 Elmwood Avenue
- MARIE THERESE PERRON, B.S., *Laboratory Aide in Pathology*
17 Russell Street
- JEAN MARGARET RYAN, B.S., *Technician in Pathology* 50 Decatur Street

OFFICE PERSONNEL

- CORNELIA JOSEPHINE BAYLIES, A.B., *Secretary to the Dean*
28 Clarke Street
- VERA I. CHADBURN, B.S., *Secretary, Department of Bacteriology and
Clinical Pathology*
89 Buell Street
- MRS. MARGARET M. HINMAN, B.S., *Secretary, Dean's Office*
380 Pearl Street
- RUTH DOROTHY JEPSON, B.S., *Secretary, Departments of Anatomy
and Biochemistry*
32 East Avenue
- MRS. EDYTHE B. LADD, R. N., *Dispensary Nurse* 27 Decatur Street
- CONSTANCE MAE PEASE, *Secretary, Departments of
Pharmacology and Physiology* 24 Hungerford Terrace
- MRS. REBECCA M. SHEEHAN, *Secretary, Department of Pathology*
41 Nash Place
- MRS. PHYLLIS VIETS, *Secretary, Department of Pathology*
41 Bradley Street
- MRS. MARJORIE E. WRIGHT, *Secretary, Department of Pathology*
79 Loomis Street

ADMINISTRATION

The University of Vermont and State Agricultural College consists of the College of Arts and Sciences, the College of Technology, the College of Agriculture, the College of Medicine, and the School of Education and Nursing. The College of Medicine is a member of the Association of American Medical Colleges and is rated as an approved institution by the Council on Medical Education and Hospitals of the American Medical Association.

Inquiries as to admission to the College of Medicine, requests for catalogues and bulletins should be addressed to the Dean, College of Medicine, University of Vermont, Burlington, Vermont.

Requests for information and correspondence of a general character concerning the work of the institution as a whole or its relation to its constituency should be addressed to the President.

All telephones are listed under "University of Vermont." Anyone desiring information concerning the University may secure the same during office hours by calling telephone number 5000. For information concerning the Medical College, call 5000, extension 253 or 279.

HISTORY

The College of Medicine of the University of Vermont is one of the oldest institutions of its kind in the United States. A lecturer on Surgery and Anatomy was appointed by the Trustees of the University Corporation on August 16, 1804. The first full and regular course of lectures, however, was not given until the fall of 1822. In 1829 a Medical College building was erected at the south end of the campus. In 1836 the College was abandoned because of the death of some of its leading spirits and for lack of students. There had been graduated up to that time one hundred and sixteen men.

The reorganization and successful re-establishment of this school were due chiefly to the efforts of Dr. S. W. Thayer, then a practitioner at Northfield. His efforts date back to 1840 and finally were successful in 1853. Dr. Levi W. Bliss of Bradford was also active in securing the reopening of the College. The prosperity of the newly organized department in 1854 soon became manifest, and a material enlargement of the old Medical College building at the head of Main Street was demanded. A sum was raised and the necessary improvements made. In 1870 the citizens of Burlington contributed an additional sum of two thousand five hundred dollars to enlarge the building further by the addition of a wing and to increase the seating capacity of the two lecture rooms. In 1884 the late John P. Howard generously gave a commodious building at the head of Pearl Street which was occupied first in 1885.

Until 1899 the relation of the College to the University was chiefly nominal. It was then reorganized and made a coordinate department of the University under the control of the Board of Trustees and its facilities both for teaching and study were increased materially. New rooms and improved apparatus were added and additional instructors secured. In 1903 the college year was lengthened to seven months and in 1907 to seven and one-half months, giving thirty weeks of actual instruction. In December, 1903, the building which had been occupied by the College for twenty years was destroyed by fire. A new building was begun in August, 1904, and was dedicated in June, 1905.

In 1911 the faculty of the College of Medicine was reorganized and the department made an integral part of the University system. With the opening of the college year of 1912 the entrance requirements were raised to one year of collegiate work and the college year was made equal in length to that of the academic colleges. Beginning in September, 1917, a regulation went into force, providing that two full years of academic college work should be required for admission. This requirement has now been increased to three years of college work. In 1920 women were admitted to the College of Medicine.

THE COLLEGE OF MEDICINE BUILDING

The College of Medicine occupies a modern building on Pearl Street at the north end of the College Green. On the first floor of the building are located the Administrative Offices of the College and the Histology, Pathology, and Bacteriology Laboratories. An amphitheatre, capable of seating one hundred and fifty, is located on this floor. A second amphitheatre of slightly smaller capacity is located on the second floor. The Library of the College of Medicine, which is a division of the University Library, occupies the southwest portion of the second floor. In addition, there are located on this floor the offices and laboratories of the Departments of Biochemistry and Pharmacology, as well as those of the Division of Experimental Medicine. On the third floor are housed the Departments of Anatomy and Physiology. The Department of Anatomy has modern equipment, including a special teaching museum and other facilities for teaching, made possible by generous contributions of the Alumni of the College of Medicine. A modern refrigeration unit insures excellent preservation of specimens. The teaching museum includes a permanent display of cross sections of a complete male body, together with additional head sections and female pelvic sections, housed in glass-topped containers. The student laboratory, used by the Pharmacology and Physiology Departments is equipped for all types of teaching.

All departments are equipped with laboratories for research and technical work. The animal house, adjacent to the College of Medicine, is used

by all departments for research and student teaching. In 1947 an additional building was constructed to provide increased animal quarters for expansion of the work in the field of cancer research.

Adjacent to the building of the College of Medicine is the building which houses the Vermont Department of Public Health. This department cooperates with the College of Medicine in the teaching of public health and preventive medicine.

CLINICAL FACILITIES

The normal capacity of the general hospitals in Burlington used by the Medical College is 430 beds. More than 200 additional beds will become available from hospital additions already under construction or planned for the immediate future. At least four hundred of these beds will be used without restriction by the College for clinical teaching. Services in urology and neurology at the Worcester City Hospital, as well as general services at the Rutland, Springfield, St. Albans and Brightlook (St. Johnsbury) Hospitals, increase the amount and variety of clinical material.

Other clinical facilities available for student teaching are the outpatient and dispensary services in Burlington, with over 20,000 patients a year; the services of the Vermont State Hospital for Mental Disease at Waterbury, Vermont, with more than 1,100 beds; the Vermont Sanatorium for tuberculosis and the Caverly Preventorium at Pittsford, 85 and 48 beds respectively; the Trudeau Sanatorium in Trudeau, New York; the Children's Home, the Elizabeth Lund Home and St. Joseph's Orphanage in Burlington. The number of children in the three Burlington institutions is more than 500.

Admissions to the medical, surgical, obstetrical, and specialty services used for teaching purposes approximate 12,000 annually exclusive of the special facilities just described. This amount of clinical material is adequate for the limited enrollment of forty students in each of the two classes doing clinical work.

HOSPITALS

THE MARY FLETCHER HOSPITAL. This general hospital has 193 beds and 37 bassinets, but will be enlarged to at least 300 beds in the near future. It has been associated with the College of Medicine as a teaching hospital since 1879, and has all types of medical and surgical services. The hospital has a yearly average of approximately 11,000 cases, not including some 2,000 outpatients. At least two thirds of the patients are available for teaching purposes through the use of free and part-pay beds and the use of private cases by attending staff men as members of the faculty of the College of Medicine. The hospital is approved by the American Medical Association for intern training and for residencies in medicine, radiology,

surgery, anesthesia, pathology, pediatrics, obstetrics-gynecology and urology.

THE BISHOP DEGOESBRIAND HOSPITAL. The Bishop DeGoesbriand Hospital is a modern and completely equipped institution, located on the west side of the College Green and across from the College of Medicine. It is fully approved for intern training and has approved residences in Surgery, Medicine and Anesthesia. The present capacity of the hospital is 125 beds, of which 43 are allocated to private patients. Teaching services are established in the hospital with the use of service patients and certain private patients for student teaching. Approximately 5,800 patients are admitted annually to the hospital. All types of cases are represented.

A new wing with over 100 additional beds is under construction and will be ready for occupancy during the year 1948. This will increase the number and variety of patients available in teaching third and fourth year students. The latter are assigned for one month in residence in the hospital.

Members of the attending staff are required to be members of the Faculty of the College of Medicine.

THE FANNY ALLEN HOSPITAL, WINOOSKI. This general hospital of 75 beds, the smallest of those associated with the College, presents an unusually large and varied amount of teaching material in 3,000 or more cases admitted there yearly. Practically all of these are service cases. The attending staff hold teaching appointments in the College and take charge both of third year ward work and fourth year clinical clerkships. Sections of fourth year men are assigned to this hospital for a month of service. Under the close supervision of the teaching staff, they assume the duties of interns. Sections of third year men are assigned for ward work.

keeps complete records, and acts in the capacity of a labor clerk. He

THE WORCESTER CITY HOSPITAL, WORCESTER, MASSACHUSETTS. Sections of fourth year students are assigned for one month of clinical clerkship in urology at this hospital. It includes work on outpatient and inpatient services in general urology and venereal diseases. The service is under the direct supervision of the head of the Division of Urology in the Department of Surgery. Teaching is carried on by the attending staff in urology, all of whom hold appointments in the College. The urological service averages over 600 inpatient and 3,600 outpatient cases annually. In addition to work in urology, the section at Worcester also carries an assignment in clinical neurology under the tutelage of the attending staff in neurology who are faculty members of the University of Vermont College of Medicine. The work includes inpatient and outpatient instruction. The student section in Worcester participates in grand ward rounds and attends staff meetings and conferences of the medical services. On assign-

ment to this service, students take up residence for a month in Worcester. As with all senior services, the work is on a day-around basis.

OBSTETRICAL SERVICE. The obstetrical service includes attendance at the maternity ward of the Mary Fletcher Hospital, the prenatal and postnatal clinics held at the Burlington Free Dispensary, and a service at the Elizabeth Lund Home. Sections of fourth year students spend one month on this service.

The service at *The Elizabeth Lund Home* is under the direction of the Professor of Obstetrics of the College of Medicine. Patients are assigned to individual students under the supervision of a clinical instructor. The student takes histories, does general physical and obstetrical examinations, observes or assists at deliveries. At the Lund Home the student is taught a technic designed to meet obstetrical problems under conditions which might be found in a private home where only limited resources and limited facilities are at hand. Hospital technics are learned in the study of labor cases attended at the *Mary Fletcher Hospital*.

PEDIATRICS. The wards of the three local hospitals, the St. Joseph's Orphanage, the Children's Home, and the Elizabeth Lund Home furnish teaching services in pediatrics. To this is added clinical work at the Caverly Preventorium. This institution is under the personal direction of a member of the teaching staff.

THE RUTLAND, SPRINGFIELD, ST. ALBANS, AND BRIGHTLOOK (ST. JOHNSBURY) HOSPITALS. These general hospitals located outside of the Burlington area, are used for teaching senior students. Such students are assigned in rotation for a month of instruction under the supervision of a staff member who acts as preceptor.

This type of teaching is of particular value in giving students opportunity to see the general practice of medicine, as well as the more specialized type of practice. It also establishes a desirable cooperation between hospitals throughout the State and the College of Medicine.

VERMONT STATE HOSPITAL, WATERBURY. A hospital of 1,100 beds for patients suffering from mental diseases, admitting about 360 patients each year. This makes it possible to have available at nearly all times patients illustrating the various clinical syndromes. Students attend occasional clinics here during the third year and are in residence for one month during the fourth year.

THE VERMONT SANATORIUM AND CAVERLY PREVENTORIUM, PITTSFORD. The Vermont Sanatorium for tuberculosis has 65 beds and the Caverly Preventorium for undernourished children has 45 beds. Both are located at Pittsford and are under the supervision of a member of the faculty of the College of Medicine.

In these institutions, the students receive intensive instruction in tuberculosis as related to the individual and as related to the problem of the public health. The small number of students assigned makes possible individual instruction by staff members.

TRUDEAU SANATORIUM, TRUDEAU, N. Y. This cottage sanatorium of 200 beds for treatment of tuberculosis is used for teaching senior students. Approximately 200 patients are admitted each year. Students are in residence one month during the fourth year. They do histories and physical examinations on newly admitted patients and work on case problems; they attend staff conferences, clinics and X-ray readings. They also observe work in the bacteriology, physiology, biochemistry and pathology laboratories, and attend lectures, seminars and ward rounds by staff members.

DISPENSARIES. Teaching dispensaries are maintained by the College of Medicine in cooperation with the Charity Department of the City of Burlington and the Mary Fletcher Hospital.

By arrangement with the Charity Department, such patients as cannot afford to employ private physicians are assigned to the College of Medicine, whose authorities provide care. These include ambulatory patients, as well as patients needing hospitalization. To provide adequate care, the College of Medicine, in cooperation with the Charity Department, maintains a City Service with a dispensary in the Howard Relief Society Building at 174 Pearl Street in Burlington and a day-and-night home visiting service operating from the Dispensary Building. Both intern and extern services are in charge of directors appointed by the College of Medicine. This affords adequately supervised instruction of the dispensary and home visit types. Of additional advantage is the opportunity for the student to study the home environment and its relation to illness. Further correlation of social factors with illness is made possible by cooperation with such social agencies as the Howard Relief Society, the Vermont Children's Aid Society and the Visiting Nurses Association, all of whose offices are in the Dispensary Building.

The Mary Fletcher Hospital, in cooperation with the College of Medicine, maintains outpatient clinic services at the hospital. As in the case of the Pearl Street Dispensary, medical and surgical clinics, as well as clinics for patients needing specialty services, are held. Patients are referred to such clinics by private physicians.

In all of the dispensary services, patients are assigned to students for study. Diagnostic aids and services may be obtained from the different hospitals, to which patients may be referred. All such teaching is on the basis of individual instruction, with opportunity for the student to follow his patient through to completion of the study and treatment.

REFRESHER COURSES

Refresher courses have been established primarily for the returning veterans and for those physicians who wish a review of recent developments in diagnosis and treatment. The work is informal and designed to meet each individual's needs; classes are limited in number. Three courses are given. The course in General Practice is 12 weeks in length; the courses in Internal Medicine and in Surgery have a minimum length of 4 weeks.

MEDICAL LIBRARY

The medical library is on the second floor of the College of Medicine building. The location makes it easy of access for students and faculty members. Reading rooms, a microfilm reader, current medical periodicals and bound editions of such journals afford general library facilities. Instruction in the importance and proper use of these facilities is given by the librarian and faculty members in the first year.

From time to time valuable additions to the library collection have been received from alumni and friends who, in various ways, have donated their medical libraries to the College of Medicine. This source of valuable books has greatly helped in the building up of the library collection.

The Stone Memorial Fund was contributed by the family, associates, friends and students of Dr. Bingham H. Stone, late Professor of Pathology. The income from the fund is used for the purchase of books or periodicals dealing with pathology or related subjects. This material, together with Doctor Stone's own books, given by Mrs. Stone, makes up the Stone Memorial Library, which is an integral part of the library of the College of Medicine.

MEDICAL MUSEUM

The College of Medicine maintains a museum with a large collection of specimens for use in teaching. In order to obtain the maximum use of this collection and to make it more readily available for teaching purposes, most of these specimens are distributed throughout the teaching laboratories.

LABORATORY FACILITIES

In addition to the teaching laboratories of the College of Medicine, the laboratories of the State Board of Health may be used for teaching purposes. These include bacteriological, diagnostic, serological, medico-legal, food and water laboratories, located in a University of Vermont building next door to the College of Medicine.

Through close cooperation between the State Board of Health and the College of Medicine, staff members of the former have faculty appointments and give instruction to students in preventive medicine and public health. This arrangement is designed to promote the common interests of the two institutions and to educate the medical student for the essential

part he must play as a practicing physician in the maintenance of public health. It helps to integrate the teaching of clinical medicine, preventive medicine, and public health and to emphasize the relationship of the individual, as a clinical entity, to the population as a whole.

DIVISION OF PHOTOGRAPHY

The division of photography has photographic equipment and laboratories at the College of Medicine for photomicrographic and other types of photographic work. The facilities of this division are in charge of a full-time photographer whose services are available to all departments of the College of Medicine and the local hospitals.

PARTICIPATION IN HEALTH ACTIVITIES WITHIN THE STATE

The Legislature of the State of Vermont has made provision for the maintenance of a State Cancer Commission whose functions are case-finding through early diagnosis, and the promotion of prompt treatment by the medical profession of patients suffering from malignant neoplasms. Through full-time and part-time faculty members, the College of Medicine has supplied the staff for clinics held in Burlington and has provided facilities, as well as personnel, for laboratory diagnosis of the cases seen in Commission Clinics. The close cooperation between the faculty of the College of Medicine, the State Division of Women's Field Army against Cancer, the practicing physicians throughout the State, and the Cancer Commission, is another instance of the public service rendered by the University of Vermont through its College of Medicine, in fields related to the education and protection of the public, as well as the education of medical students who later become medical practitioners in the State.

The College of Medicine takes an active part in the preventive work done in tuberculosis, mental disease, diseases of the eyes, and corrective work for crippled children. The clinics for these conditions are largely staffed by State organizations, assisted financially and in other ways by the College of Medicine. The College furnishes quarters and diagnostic facilities for various of these organizations.

In the field of maternal welfare, hospitalization for lying-in cases is supplied by the College of Medicine where inability to pay for such care makes it necessary. Clinics for the diagnosis and treatment of disease conditions are maintained by the College, in cooperation with local hospitals, for patients who cannot afford to pay for such services and who may be referred to the clinics by their physicians. In all health activities throughout the State, the College of Medicine takes an active part.

The College of Medicine, in cooperation with local hospitals, sponsors organized courses in postgraduate medical studies for practitioners in the State of Vermont. These courses are designed as a continuation of study in the fields of medicine by medical practitioners after their graduation.

FEES AND EXPENSES

Application Fee	\$ 10.00
Registration Fee (Required only for first registration)	5.00
Fee for late registration	6.00
Tuition Fee for each session for Vermont students	550.00
Tuition Fee for students not residents of Vermont	700.00
Osler Clinical Society Fee	3.50
Locker Fee for each of first, second, and third years	1.00
Fee for the Doctor's Degree, payable at graduation only	25.00
Locker Key Deposit—Paid on admission; refunded end of third year	1.00

Average Range

Room Rent	\$200.00 to \$300.00
Board	300.00 to 400.00

Students entering the College of Medicine who have never been previously enrolled for a regular session in one of the Colleges of the University are charged \$5.00 as a fee for registration.

All students who enter the first year in the College of Medicine following three years' attendance in the College of Arts and Sciences of the University of Vermont are charged the academic student activity fee of \$15 for that year. This includes the Osler Clinical Society fee of \$3.50 a year. All students are required to pay the latter fee each year they attend the College of Medicine. Other medical students may, by paying the student activity fee, become entitled to the benefits students receive from payment of that fee.

Every student must provide himself or herself with a microscope of the following specifications. Such microscopes must be in his or her possession for use during the entire medical course.

A satisfactory compound microscope equipped with:

- (a) An Abbe substage condenser with iris diaphragm
- (b) One 10X ocular
- (c) Three objectives with lenses free from defects and capable of giving clear images—low power (16 mm.), high dry power (4 mm.), and oil immersion (1.8 mm.)
- (d) A three-place nosepiece
- (e) A mechanical stage
- (f) Properly functioning fine and coarse adjustments.

Students must provide microscopical supplies for use in the various laboratories.

Each student must purchase a dissecting case for use in the Anatomical Laboratory.

Medical textbooks, outlines, student supplies and equipment are sold at the University Store in the Waterman Memorial Building.

The tuition fee is payable in two equal installments at the beginning of each semester. Students are not admitted to classes of a half year until the comptroller's receipt has been issued.

Students temporarily absent from the University are charged as if present.

Students who engage a room in a College dormitory are liable for the rental charge for the entire year.

A student who has been dropped into a lower class because of deficiency in his work, or for other reason, will be required to pay his bills for the additional year or years in which he may be a member of the University.

In no case will a scholarship or tuition exemption be available for more than four years.

HONORS AND PRIZES

The five students who have been top-ranking during the entire four years' course of study in the College of Medicine, are graduated as Doctors of Medicine, *cum laude*.

The Governor Woodbury Prizes.—The income from a fund of one thousand dollars provides annually two equal prizes. The first is awarded at graduation to the student who has shown the greatest proficiency in clinical work. The other is awarded to the sophomore having the highest standing in the subjects of the first two years. The amount of each prize is determined by the income obtained from the investment of the fund.

The Carbee Prize.—A prize fund of three thousand dollars was established by the late Mrs. May D. Carbee of Haverhill, N. H., in memory of her husband, Moses Dyer Carbee, M.D., of the class of 1873. The annual income from the investment of this fund provides a prize to be awarded annually to that student of the Senior class who has shown the great proficiency in the field of Obstetrics. The Department of Obstetrics makes the award.

Nu Sigma Nu Merit Awards.—Two merit awards are given annually by the local chapter and the National Executive Council of Nu Sigma Nu Fraternity, one to the outstanding junior and one to the outstanding freshman. These awards are based on scholarship attainment, character, leadership, general sociability, and extra-curricular activities.

Lamb Foundation Prizes.—Prizes of seventy-five, fifty and twenty-five dollars will be offered during the year 1948-49 by the Lamb Foundation to students in the College of Medicine. The awarding of these prizes will be for student interest, application to and work on the problems of patient comfort and doctor-patient relationship.

Book Awards.—Book prizes for meritorious work were awarded in June 1948 by the following publishing companies: Lea and Febiger, C. V. Mosby, and Williams and Wilkins.

FELLOWSHIPS AND RESIDENCIES

The Trustees of the University of Vermont have established two teaching fellowships in clinical medicine for graduates in medicine who wish to pursue further graduate studies. The fellowships are usually granted for a period of two years.

The College of Medicine, in cooperation with the Mary Fletcher Hospital and the Bishop DeGoesbriand Hospital, has established fellowships and residencies in Medicine, General Surgery, Pathology, Pediatrics, Obstetrics-Gynecology, Urology, Radiology and Anesthesiology. These fellowships and residencies are approved by the American Medical Association.

SCHOLARSHIPS AND LOAN FUNDS

A scholarship fund of three thousand dollars was established by the late Mrs. May D. Carbee of Haverhill, N. H., in memory of her husband, Moses Dyer Carbee, M.D., of the class of 1873. The income derived from the investment of this fund is given annually to a deserving student in the College of Medicine.

By Act of the Legislature in 1919, the State of Vermont provides annually fifty State Scholarships of \$100 each in the College of Medicine for residents of the State of Vermont who may need financial assistance. To qualify for such scholarships, students must have resided in Vermont two consecutive years preceding enrollment. Where students accept these scholarships, they must agree to practice medicine in the State of Vermont one year for each year such aid is given, or refund the amount of aid received. Application blanks may be obtained at the Dean's Office.

A loan fund of four thousand dollars was established by the late Mrs. May D. Carbee of Haverhill, N. H., in memory of her husband, Moses Dyer Carbee, M.D., of the class of 1873. Students in the College of Medicine in need of financial assistance may apply for loans from this fund.

The Edith Blanche Kidder Scholarship Fund was established by the late Joseph W. Kidder. This is for students in the College of Medicine, preference being shown to legal residents of Barre, Vermont. The amount of each scholarship is determined annually by the income from the invested fund.

The Medical College Loan Fund is available for loans to students enrolled in the College of Medicine.

The W. K. Kellogg Loan Fund was established in May 1942 by a gift of \$10,000 from the W. K. Kellogg Foundation. It provides loan funds for students of ability in the College of Medicine who may be in need of financial assistance.

Certain special and endowed scholarships and funds, including the Wilbur Fund, are available to students of any college in the University. See the catalogue number of this Bulletin.

PREMEDICAL CURRICULUM

Although students may be accepted for admission to the College of Medicine after the satisfactory completion of three years of work in an approved college of arts and sciences, it is usually preferable that they complete four years of academic work in such an institution before undertaking the study of medicine. In either case, they must complete in a satisfactory manner the courses set up by the Council on Medical Education and Hospitals of the American Medical Association as minimum subject requirements for entrance to approved medical schools. These include satisfactory courses in English, Physics, Biology, Inorganic Chemistry, and Organic Chemistry.

For those who wish to obtain the Bachelor's and Doctor's degrees but find it impossible to spend eight years in obtaining them, a combination curriculum of seven years has been provided at the University of Vermont. A candidate must complete the work of the first three years in the College of Arts and Sciences, including the requirements for admission to the College of Medicine. In his fourth year, he will be considered as being enrolled in both the College of Arts and Sciences and in the College of Medicine, but will pursue only the studies of the first year in the latter college. Upon the successful completion of the first year in the College of Medicine, he will receive the Bachelor of Science degree.

Students from other institutions who desire to receive both degrees, must complete at least one full year's work in junior or senior standing in the College of Arts and Sciences at the University of Vermont before entering the College of Medicine.

The College of Arts and Sciences of the University of Vermont enrolls those students preparing for the study of medicine in its regular curricula. Each student receives the guidance of an adviser who will assist him in choosing the proper courses of study. Although considerable flexibility of choice is allowed, the program most frequently selected during the freshman year includes the following: English, Chemistry, Biology, Mathematics, and a foreign language.

At the end of each year, all students who are preparing for the study of medicine appear before the Medical Advisory Committee composed of

representatives of the College of Medicine and the College of Arts. This Committee advises the students on the selection of further courses of study and on the desirability of continuing premedical preparation.

As the study of medicine properly begins in undergraduate days, the College of Medicine endeavors to obtain early contact with students during that period and to maintain such contact. In this manner it can give help and advice to students in course planning and in establishing a relationship between the work taken in premedical school courses and the continuation of these courses in the College of Medicine. Not only can the basic preparation of the student be broadened and improved in this manner, but students become better able to evaluate their qualifications for the study and possible practice of medicine through personal conferences with members of the faculty of the College of Medicine. Students are encouraged to consult faculty members in making plans for the study of medicine.

REQUIREMENTS FOR ADMISSION

The minimum requirements for admission to the College of Medicine are three years of college work done in an institution listed among the "Approved Colleges of Arts and Sciences," compiled and published by the Council on Medical Education and Hospitals of the American Medical Association. The College of Medicine requires one year each of English, General Chemistry, Organic Chemistry, Physics, and Biology, but recommends other courses in English, at least one year of Mathematics, and work of such grade in a foreign language that the student will have conversational use and reading knowledge of the language. These should be regarded by the student as minimum basic requirements. Additional broad and well-planned courses of study should include work in the fields of History, Economics, Sociology, Psychology, Philosophy, Music, and the arts.

Special Note.—A course in Quantitative Chemistry will be required of students entering the College of Medicine in the fall of 1950 and thereafter. It is recommended for students entering in the fall of 1949. Since so much of the laboratory work in Biochemistry is quantitative, it is felt that adequate training in quantitative procedures is essential.

The Admissions Committee expects applicants to have completed a program equivalent to that outlined but reserves the privilege, at its discretion, to give favorable consideration to applicants with three years of college work of a different type, provided it includes acceptable credits in the required courses.

Eligibility for admission to the College of Medicine of an applicant, who has fulfilled the entrance requirements as stated, is determined by the Admissions Committee of the College of Medicine on the basis of the following:

1. Personality and general fitness of the applicant for the study and practice of medicine. This is determined by recommendations and especially by personal interview with the Admissions Committee. Dates for these interviews are announced by the Committee.
2. The scholastic record of the applicant in his premedical work, as well as the score earned in the Professional Aptitude Test adopted by the Association of American Medical Colleges.

Because of limited teaching facilities, a maximum of forty students is admitted to the entering class. In the selection of eligible applicants for admission, the following preferences are, in general, observed by the Admissions Committee.

First preference is given to residents of the State of Vermont. Second preference is given to sons and daughters of alumni. Third preference is given to residents of the northeast New England area outside of the State of Vermont, and to graduates of land-grant colleges in New England.

Individuals selected by the Admissions Committee as eligible for admission will be given personal interviews. The Dean's Office will notify such applicants of the appointments for interviews.

Application blanks may be secured from the Dean's Office, College of Medicine, University of Vermont, Burlington, Vermont.

Applications for admission to the class entering in September of any year will close on the April 15 preceding the September admission. Applications postmarked up until midnight of April 14 will be considered. An application fee of ten dollars, payable to the University of Vermont and State Agricultural College, must accompany all applications.

ENROLLMENT

On a day designated at the opening of each semester, registration and enrollment take place. Payment of tuition and other fees must be made at this time.

Students who fail to register on the day designated for registration will be required to pay the fee for late registration.

ADMISSION OF STUDENTS TO ADVANCED STANDING

When vacancies occur, students may be considered for advanced standing. Such students will be accepted only on the conditions stated herewith.

1. That the premedical and medical work be in accord with the courses required at this institution, and have been taken at an institution approved by the Council on Medical Education and Hospitals of the American Medical Association.
2. That the scholastic record is satisfactory.
3. That the previous record shows that one or more years have not

been repeated on account of low scholarship regardless of class standing.

4. That the statement of record shows no condition and that said statement be accompanied by a letter of honorable dismissal.

No applicant for advanced standing will be enrolled under more favorable conditions than would obtain were he to continue at the institution from which he seeks to transfer.

A personal interview is required of all applicants for admission by transfer to the College of Medicine. Preference will be given to residents of the State of Vermont, particularly those holding a baccalaureate degree.

Students desiring advanced standing are subject to the same rules in regard to advancement in course as students who have attended the College of Medicine of the University of Vermont.

Students dismissed by reason of failure grades from other institutions will not be considered for admission to any class in the College of Medicine.

REQUIREMENTS FOR ADVANCEMENT IN COURSE

Attendance upon the exercises assigned for the year is obligatory. Students must attend at least 80 per cent of the exercises in any course. Failure to do this constitutes a failure in that course. The course of instruction in the College of Medicine requires four consecutive school years. No student is eligible for a medical degree who has not been registered in medical school four complete years. Any resumption of study after absences greater than the time allowed for absence will be permitted only on majority vote of the Faculty of the College of Medicine upon the recommendation of the Admissions Committee.

The work of each year is final and students are advanced when they have satisfactorily completed the work assigned for the year.

The standing of each student in his class at the end of the session is based upon the general character of his work in the different laboratories and other practical exercises, upon the character of his recitations, and upon the results of all examinations held during and at the end of the course.

The work of students is evaluated on the basis of 100 per cent. The lowest passing grade is 75 per cent except in the case of minor subjects. A grade of 60 per cent is accepted for individual minor subjects, but in any one year the general average for a group of minor subjects must be 75 per cent.

Any student who has failed in more than 25 per cent of the number of courses in any year will not be allowed to advance with his class. Neither shall he be allowed to repeat the work of that year, except upon recommendation of the Committee on Advancements and by vote of the Faculty.

Students who fail in not more than 25 per cent of the work by subjects in the first, second, or third years may be re-examined in these subjects at the regular examination period preceding the opening of the next school year. The marks obtained in this re-examination are computed with the credits earned during the preceding year in exactly the same way as those obtained in the examination at the end of the course. However, the highest final grade allowed for a course passed on re-examination shall be 75 per cent.

A student who, upon re-examination in any subject, again fails, will not be advanced unless such failure be in a single subject which is not completed in that year. In the latter case, the student may, upon recommendation of the head of the department in which he failed, and by vote of the Faculty, be advanced with a condition.

A student will not be permitted to become a member of the third-year class until he has removed all conditions of the first year; and a student will not be permitted to become a member of the fourth-year class until he has removed all conditions of the second year.

A student, whose grade average for the year is less than 80, may be required to repeat the year's work or to withdraw from school. Such action may be taken only after review of his status by the Committee on Advancement and formal approval of the Faculty.

A student who has been a member of either the first-, second- or third-year class for two school years, and has failed to fulfill the requirements for advancement, or a student who has been a member of the fourth-year class for two school years and has failed to fulfill the requirements for graduation will not be enrolled again as a student of the college.

A student who fails to present himself at the appointed hour for any examination at which he is due to appear will be treated as having taken the examination and failed to pass it, unless he is excused from such examination by the Faculty.

The following additional requirements for advancement have been adopted by the Faculty of the College of Medicine and apply in all cases.

The scholastic records of all students shall be reviewed by the Committee on Advancements at the end of the course work and may be reviewed at any time.

Freshmen: Rules regarding failures apply, except that the Committee on Advancements is empowered to review cases of failure and make such recommendations to the Dean and the Faculty as it may see fit.

Sophomores: Second-year students will be admitted to the sophomore comprehensive examination upon recommendation by respective department chairmen, subject to the approval of the Committee on Advancements and the Dean. Advancement to the third year shall be conditioned upon recommendation of the Committee on Advancements and the Faculty.

Juniors: The third-year students shall be judged on the basis of course work, present rules regarding failures to hold except that the Committee on Advancements is empowered to review cases of failure and make such recommendations to the Dean and Faculty as it may see fit.

Seniors: Fourth-year students will be admitted to the senior comprehensive examination upon recommendation of respective department chairmen, subject to the approval of the Committee on Advancements and the Dean.

REQUIREMENTS FOR GRADUATION

Candidates for the degree of Doctor of Medicine must have reached the age of twenty-one years and must have presented satisfactory evidence of good moral character. All the requirements of this college in regard to preliminary education must have been met, and the candidate must have attended regularly and completed satisfactorily the prescribed work of the four courses of instruction. The degree of Doctor of Medicine is granted by the Board of Trustees of the University of Vermont and State Agricultural College to candidates from the College of Medicine only upon the recommendation of the Committee on Advancements and the Faculty of the College of Medicine to the University Senate.

While internship is not required for graduation, graduates are expected to serve at least a one-year internship in a hospital approved by the Council on Medical Education and Hospitals of the American Medical Association.

All candidates for degrees must be present at Commencement unless excused by the President of the University.

OUTLINE OF THE CURRICULUM

The curriculum of the College of Medicine is designed to train general practitioners of medicine. Courses of instruction are so planned as to enable the student to fit himself for general practice and he is encouraged to enter this very important field. This helps to meet the urgent need for an increase in the number of general practitioners. It also supplies the best background of medical training for such students as may later elect to enter fields of specialization.

The basic plan of the curriculum centers about clinical teaching. Effort is made to correlate instruction in every year with clinical medicine. By using the clinical approach in laboratory and classroom early in his career, the student is brought into contact with the patient.

The student studies first the general structure of the body, its embryological development, the functions of the various organs, the chemical processes taking place in the body and the minute structure of the tissues and organs in health.

Then follows consideration of the changes in gross and microscopic anatomy, the variations in the chemical processes and in the functions of organs and tissues under the influence of disease and how such changes give rise to different symptoms and physical signs. The methods of interpreting such findings in arriving at a diagnosis are considered.

The student then studies the methods of investigating diseases, their causes and prevention, as well as the remedies used in treatment. The various surgical conditions with the indications for treatment or operation are considered. Reproduction and development are studied, together with the management of normal and abnormal labor.

Instruction is given by lectures, demonstrations, recitations, library work, practical courses, laboratory work, clinics and clinical teaching, at the bedside and in the dispensary. For clinical work the class is divided into small sections. Each student, therefore, receives the personal attention of the instructor and is given every opportunity for the full use of assigned material.

In the First Year, the usual courses in Anatomy, Physiology, Biochemistry, Histology, Embryology, Neuro-anatomy and Bacteriology are given.

In addition, short orientation courses in Psychiatry, Chemistry, and the use of the Library, are given in the first semester of the first year. These courses have a twofold purpose. They are primarily designed to maintain continuity between premedical school work and that given in medical school. Secondarily, through these courses the student learns the need for and the proper use of certain important tools in the field of medicine.

The introductory course in Psychiatry emphasizes the basic principles of Psychology. It discusses the emotional response of the individual to his environment. It helps the student early in his medical career to recognize and establish causal relationship between psychological factors in the patient's life and disease manifestations.

The short course in Chemistry focuses the attention of the student on that subject as a science related in a practical manner to the processes of growth and development, health and sickness, life and death. It emphasizes the basic importance of his already acquired knowledge of Chemistry and the practical use of it in the qualitative and quantitative aspects of vital phenomena.

The course of instruction in the use of the library and its facilities aims to make the student aware of the library, the important part it plays in all medical work and the necessity to understand its proper use. The course includes lectures on library organization, administration and services. These are given by members of the library department. Practical exercises in the library are given by faculty members to students so they may become familiar with medical literature, its sources and the proper techniques employed in bibliography.

In the Second Year courses are given in Pharmacology, Pathology and Public Health. Anatomy, Physiology and Psychiatry are continued in this year. Courses in Medicine, Surgery, Obstetrics, Pediatrics and Physical Diagnosis are also given. As part of the plan to integrate the student's work in all courses, a two-hour correlation conference is held each week during the second semester. This conference is designed to emphasize inter-departmental relationships. Selected cases are presented and all department members take part in the presentation and discussion.

The work of the Third Year includes continued work in Medicine, Surgery, Obstetrics, Pediatrics, and Pathology. The third year course in Pathology is a continuation of the general course in the second year. Surgical Pathology is also included in the work of this year. Radiology and Physical Medicine are taught throughout the year. The students are also given work in Eye, Ear, Nose and Throat, with clinic and ward instruction.

The course in Physical Diagnosis is continued in the third year. Students are assigned in small sections to the hospital wards, where they take histories and do physical examinations under supervision. This work includes case presentation.

The weekly correlation conferences of the second year are continued throughout the third year. In this year, the conference again serves the important role of keeping the basic sciences integrated with clinical teaching. Members of all departments take part in the presentations, and all discussions include material from the laboratory and classroom work of the first two years.

The work of the Fourth Year is given on a twelve-month basis. Upon the completion of the work of the third year, the students begin clinical work in the teaching hospitals in rotation. The services are so arranged that sections of one to five students can be assigned to hospitals for periods of one month, allowing each student to have one month of vacation during the year. Such services include Medicine, Surgery, Obstetrics, Surgical specialties, and general services. These services are given at the Mary Fletcher Hospital, the Bishop DeGoesbriand Hospital, the Fanny Allen Hospital, the Burlington Dispensary with the City Service under the City Physician.

Rotating services of a month each are given at the Worcester City Hospital where clinical work in Urology and Neurology is given; at the Vermont State Hospital for Mental Diseases at Waterbury, where clinical work in Psychiatry and Psychosomatic Medicine is given; at the Vermont Sanatorium in Pittsford and at the Trudeau Sanatorium in Trudeau, New York, where clinical instruction is given in tuberculosis and other diseases of the chest, and at the Rutland, Springfield, St. Albans, and Brightlook (St. Johnsbury) Hospitals, where individuals in the sections are given a month of general service in residence.

During the year students attend autopsies under the instruction of the Department of Pathology. Students are given opportunity to follow these cases through with study of the gross specimens and microscopic sections.

All fourth-year students attend ward rounds, grand ward rounds, inter-departmental diagnostic conferences and the clinical-pathological conferences. In this manner the student not only receives clinical instruction, but he is constantly kept in touch with the basic work of his first two years in the College of Medicine.

DETAILS OF INSTRUCTION IN THE DEPARTMENTS OF STUDY

THE DEPARTMENT OF ANATOMY

CHESTER ALBERT NEWHALL, A.B., M.D., *Associate Professor of Anatomy,
Chairman of Department*

HOVEY JORDAN, PH.B., M.S., M.A., *Professor of Histology and Embryology*

WALTER ALVA STULTZ, A.B., PH.D., *Associate Professor of Anatomy*

FRED WILLIAMS DUNIHUE, A.B., M.S., PH.D., *Associate Professor of His-
tology and Embryology*

CAROL ROSE BURRITT, B.S., *Research Assistant in Anatomy*

FIRST YEAR:

I. *Gross Anatomy*

This course begins with a brief introduction to the study of human anatomy in general, and osteology in particular. The plan of work then provides for dissection of the body from the standpoint of topographical and regional anatomy. As a general rule, structures to be dissected during a given period are assigned in the order in which they are encountered in the dissecting room and are studied and discussed in advance so that the student will be somewhat familiar with what he expects to discover in the laboratory. The appearances of anatomical structures as shown on X-ray films are demonstrated by the Division of Radiology.

The course includes the identification of all of the more important structures found in a complete series of cross sections, as well as a study of their relationships, supplemented by surface studies on the living body as well as by the use of stereoscopic views and demonstration specimens of dissected regions.

Frequent review sessions are held and each student is given oral examinations on cadaver dissections as well as written examinations on the material presented.

An attempt is made to correlate the subject matter with other pre-clinical and clinical courses so that the student will have an opportunity to acquire a good working knowledge of gross anatomy with a minimum amount of time and effort wasted.

336 hours (21 hours per week during the first semester). This does not include 27 hours (6 hours per week for the first four and one-half weeks of the second semester) of instruction in the gross anatomy of the central nervous system which is included in the course in Neuro-anatomy (see below). *Drs. Newhall and Stultz.*

II. *Histology, Embryology, and Neuro-anatomy*

The subject matter is organized and presented in the following parts and sequence: Histology, Embryology, Neuro-anatomy. Work is carried on by means of lectures, discussions, demonstrations, and laboratory exercises, and continues throughout the first year. Among the topics considered are: technic, microscopic structure of normal human cells, tissues and organs, maturation, fertilization, cleavage, implantation, the development of body forms, tissues, and organs, the development, structure and functional organization of the nervous system. An effort is made throughout to include practical applications and correlations.

Experimental research projects, which are directly related to medical training and practice, are carried on by the students in histology on a voluntary basis under faculty guidance.

The facilities of the laboratory are available to a limited number of qualified persons for research in these subjects.

256 hours (Histology, 128 hours; Neuro-anatomy, 96 hours, including 27 hours of gross anatomy. *Professor Jordan and Dr. Dunibue*. Embryology, 32 hours. *Dr. Dunibue*).

SECOND YEAR:

I. *Surface and Radiological Anatomy*

This course consists of lectures and laboratory work in surface anatomy, in which the students outline the surface markings on the body. The course is illustrated by the use of X-ray films and is designed to correlate with the work in physical diagnosis.

40 hours (two hours per week during the first semester and one hour per week during the first half of the second semester). *Drs. Stultz and Newhall*.

II. *Anatomy: General Review*

The aim of this course is to review the subject matter thoroughly so that each student will strengthen his grasp of the essentials necessary for applying his knowledge of anatomy, always striving to keep in mind the fact that a knowledge of structure is of little use except as it contributes to an understanding of function and the ability to restore abnormal function again to normal. Emphasis is placed upon the correlation of gross anatomy with microscopic and developmental anatomy.

8 hours (one hour per week during the last half of the second semester). *Dr. Newhall*.

THE DEPARTMENT OF BACTERIOLOGY AND CLINICAL
PATHOLOGY

FRED W. GALLAGHER, A.B., M.A., PH.D., *Professor of Bacteriology and Clinical Pathology, Chairman of Department*

JOHN WEAVER KING, B.S., M.S., PH.D., M.D., *Assistant Professor of Bacteriology and Clinical Pathology*

GEORGE DOUGLAS CANATSEY, B.S., M.S., PH.D., *Instructor in Bacteriology and Clinical Pathology*

INA MAXSON, B.S., M.S., M.T. (A.S.C.P.), *Instructor in Medical Technology and Assistant in Clinical Pathology*

PRISCILLA DAVIS GOODWIN, A.B., M.T. (A.S.C.P.), *Laboratory Instructor in Clinical Pathology*

SISTER CORONA PARENTEAU, R.N., M.T. (A.S.C.P.), *Laboratory Instructor in Clinical Pathology*

FIRST YEAR:

I. *Bacteriology*

The subject matter embraces a brief survey of the general biological aspects of bacteriology including essential technics; a consideration of the principles of infection and the resistance of the body to disease; a study of the various infectious agents and their relation to disease processes. Immunology and serology are treated as integral parts of the course.

Lectures, three hours per week; laboratory, eight hours per week, second semester. 176 hours. Drs. Gallagher, King, and Canatsey.

SECOND YEAR:

I. *Clinical Pathology*

Laboratory methods and their interpretation in clinical diagnosis. Microscopic and chemical studies of urine, blood, gastric contents, exudates and transudates; hematology; blood grouping and blood transfusion; parasitology.

Lecture, two hours per week; laboratory, six hours per week, first semester. 128 hours. Dr. King and Miss Maxson.

GRADUATE STUDY IN BACTERIOLOGY

Graduate Courses

201 *Special Problems in Bacteriology*. Minor investigations in Bacteriology designed to serve as an introduction to research.

Prerequisite—Medical Bacteriology or its equivalent. 2 credit hours.

202 *Special Problems in Immunology*. Minor investigations in Immunology and Serology designed to serve as an introduction to research.

Prerequisite—Medical Bacteriology or its equivalent. 2 credit hours.

203 *Research*. Original investigations intended to culminate in a thesis for a Master's degree.

Prerequisite—Courses 201 and 202. Credit hours to be arranged.

204 *Seminar*. Attendance at the Interdepartmental seminar of the Faculty of the College of Medicine. 1 credit hour.

CLINICAL TRAINING IN MEDICAL TECHNOLOGY

The final fifteen-month clinical period of the curriculum in Medical Technology, as described in the Bulletin of the University of Vermont, is under the supervision of the College of Medicine. Courses are given at the College of Medicine and practical laboratory experience is obtained in the laboratories of the Mary Fletcher and Bishop DeGoesbriand Hospitals. Miss Maxson, Miss Goodwin and Sister Parenteau.

THE DEPARTMENT OF BIOCHEMISTRY

HAROLD BARNARD PIERCE, B.S., M.S., PH.D., *Professor of Biochemistry, Chairman of Department*

WILLIAM VAN BOGAERT ROBERTSON, M.E., PH.D., *Associate Professor of Biochemistry*

ARNOLD HAROLD SCHEIN, B.S., PH.D., *Assistant Professor of Biochemistry*

MERTON PHILIP LAMDEN, B.S., PH.D., *Assistant Professor of Biochemistry*

REGINALD FREDERICK KRAUSE, A.B., M.S., PH.D., *Research Associate in Biochemistry*

JOHN HAROLD BROWNE, A.B., M.D., *Research Associate in Medicine, assigned to Biochemistry*

SUSAN BREWSTER MERROW, B.S., M.ED., *Research Associate in Biochemistry*

ANN RUTH BAKER, *Assistant in Biochemistry*

BARBARA ALICE MOORE, *Assistant in Biochemistry*

EMILY FLANAGAN RICE, B.S., *Assistant in Biochemistry*

CONCETTA VIRGONA ALBERGHINI, B.S., *Research Assistant in Biochemistry*

OLIVE GRETA FERGUSON, *Research Assistant in Biochemistry*

FIRST YEAR:

I. *Introduction to Biochemistry*

Since the success of students in Biochemistry depends largely upon the adequacy and knowledge of premedical chemistry courses, this course

is designed to integrate premedical chemistry with biochemistry. The course reviews fundamental laws, stoichiometry, the theory of the hydrogen ion and buffers, and the chemistry of carbohydrates, fats and proteins.

Lectures and recitations, *24 hours*, first semester, first year. *Drs. Pierce, Schein, Lamden and Robertson.*

II. Biochemistry, Nutrition, Endocrinology

The course is designed to afford students an insight into the chemical transformations which take place in the living body, with special reference to man. The topics discussed are enzymes, digestion, absorption, intestinal putrefaction and feces, respiratory and cellular metabolism, blood, urine, tissues, body fluids, water balance, internal secretions, foods, nutrition, vitamins. Laboratory work is largely quantitative, covering the above topics.

Lectures and conferences, *96 hours*; laboratory, *96 hours*, second semester, first year. *Drs. Pierce, Schein, Lamden, Robertson, and assistants.*

GRADUATE STUDY IN BIOCHEMISTRY

Graduate Courses

201. Enzymology

The course will present a survey of enzymes including: classification, general properties and physical chemistry; methods of isolation, purification and assay; individual enzymes and their integration in biologic phenomena.

Lectures and seminars *2 x 2 hours per week, 15 weeks*. Open to all properly qualified students. *Dr. Robertson and Staff.*

202. Biochemical Preparations

Students taking this course will synthesize and prepare from natural sources important biologic compounds. These substances may be subjected to chemical and physiological examination for identity and purity. With the assistance of the staff, the student will review the literature and choose suitable laboratory methods.

Laboratory, *4 hours per week, 15 or 30 weeks*. Open to all properly qualified students. *The Staff.*

203. Research

This course is open to graduate students in the Department of Biochemistry. The results of the original investigations will be used as the basis for the thesis required for the degree of Master of Science.

Credit hours to be arranged. Open to all properly qualified students having a Bachelor's Degree in Chemistry. *The Staff.*

204. *Food and Nutrition*

Topics to be discussed will include composition of foods, processing and preservation of foods, the nutrition problem as it exists locally and throughout the United States, functions and requirements of dietary components and nutrition in health and disease.

Lectures and seminars, *2 x 1 hour per week.* Open to all properly qualified students. *Drs. Pierce, Browe, Krause, Lamden, Miss Merrow and Staff.*

205. *Intermediary Metabolism*

Lectures and seminars dealing with current concepts of the internal transformations of amino acids, carbohydrates and lipids.

Methods of investigating intermediary metabolism are evaluated.

Among the topics discussed are: dynamic state of the body constituents, application of isotopes to the study of metabolic pathways, and the integration of the metabolism of the proteins, carbohydrates and lipids.

Lectures and seminars. *2 x 1 hour per week.* Open to all properly qualified students. *Drs. Schein and Robertson.*

THE DEPARTMENT OF MEDICINE

ELLSWORTH LYMAN AMIDON, B.S., M.D., M.S. (Med.), *Professor of Medicine, Chairman of Department*

PAUL KENDRICK FRENCH, PH.B., M.D., *Professor of Clinical Medicine*

THEODORE HENRY HARWOOD, A.B., M.D., *Associate Professor of Medicine*

THOMAS WRIGHT MOIR CAMERON, M.A., PH.D., D.S.C., *Visiting Professor of Tropical Medicine*

SINCLAIR TOUSEY ALLEN, A.B., M.D., *Instructor in Medicine*

KATHERINE ELLA MCSWEENEY, A.B., M.A., M.D., *Instructor in Clinical Medicine*

JAMES PATRICK MAHONEY, M.D., *Instructor in Clinical Medicine*

HAROLD EDWARD MEDIVETSKY, B.S., M.D., *Instructor in Clinical Medicine*

CHRISTOPHER MARLOWE TERRIEN, M.D., *Instructor in Clinical Medicine*

JOHN HAROLD BROWE, A.B., M.D., *Research Associate in Medicine*

RICHARD WALKER AMIDON, B.S., M.D., *Fellow in Medicine*

JOHN WEAVER KING, B.S., M.S., PH.D., M.D., *Fellow in Medicine*

ROBERT PEASE SMITH, A.B., M.D., *Fellow in Medicine*

FRANK EDWARD WOODRUFF, A.B., M.D., *Fellow in Medicine*

WILLIAM HENRY HEININGER, M.D., *Assistant in Medicine*
JOHN HENRY MCCREA, B.S., M.D., *Assistant in Medicine*
AARON HINMAN GROUT, PH.B., *Lecturer in Medical Jurisprudence*

DIVISION OF DERMATOLOGY

EUGENE FREDERICK TRAUB, B.S., M.D., *Visiting Professor of Dermatology*

DIVISION OF EXPERIMENTAL MEDICINE

WILHELM RAAB, M.D., *Professor of Experimental Medicine*
WILLIAM VAN BOGAERT ROBERTSON, M.E., PH.D., *Associate Professor of Experimental Medicine*
EUGENE LEPESCHKIN, M.D., *Assistant Professor of Experimental Medicine*
JOHN HARDESTY BLAND, A.B., M.D., *Fellow in Experimental Medicine*

DIVISION OF NEUROLOGY

HIRAM EUGENE UPTON, B.S., M.D., *Assistant Professor of Clinical Medicine*
JESSE OGLEVEE ARNOLD II, B.S., M.D., *Assistant Professor of Clinical Neurology*
FOSTER LANE VIBBER, M.D., *Assistant Professor of Clinical Neurology*

DIVISION OF PEDIATRICS

ROY EDWARD CORLEY, A.B., M.D., *Associate Professor of Pediatrics*
PAUL DENNISON CLARK, M.D., *Assistant Professor of Pediatrics*
STUART STARNES CORBIN, B.S., M.D., *Assistant Professor of Pediatrics*
RALPH DANIEL SUSSMAN, B.S., M.D., *Instructor in Pediatrics*
JOHN SEELEY ESTABROOK, B.S., M.D., *Instructor in Clinical Pediatrics*
NELSON JOHN DENTE, M.D., *Fellow in Pediatrics*
STEPHEN DAVID SMITH, B.S., M.D., *Fellow in Pediatrics*

DIVISION OF PREVENTIVE MEDICINE AND PUBLIC HEALTH

WILLIAM EUSTIS BROWN, PH.B., M.P.H., M.D., *Professor of Preventive Medicine*
ROBERT BASCOM AIKEN, PH.B., M.S., M.D., *Assistant Professor of Preventive Medicine*
LOUIS BENSON, B.E.E., M.D., *Assistant Professor of Preventive Medicine*
ERALD FAIRBANKS FOSTER, M.D., *Instructor in Public Health*
HENRY LEE MILLS, D.V.M., *Instructor in Public Health*

CHARLES IVES TAGGART, D.M.D., *Instructor in Oral Hygiene and Dental Medicine*

EDWARD LAWRENCE TRACY, B.S., *Instructor in Public Health*

DIVISION OF PSYCHIATRY

RUPERT ADDISON CHITTICK, B.S., M.A., M.D., *Professor of Psychiatry*

CHARLES WATTLES STEPHENSON, A.B., M.D., *Assistant Professor of Psychiatry*

FREDERICK CHARLES THORNE, A.B., M.A., PH.D., M.D., *Assistant Professor of Psychiatry*

FRANCIS WILLIAM KELLY, B.S., M.D., *Instructor in Psychiatry*

ELIZABETH KUNDERT, B.S., M.S., M.D., *Instructor in Psychiatry*

J. LOUIS PHILIPPE FOREST, A.B., M.D., *Instructor in Clinical Psychiatry*

SECOND YEAR:

I. *Physical Diagnosis*

One hour a week throughout the year is given to instruction in the methods of physical examination. This is followed by a two-hour session during which time the class is divided into small sections and assigned to members of the staff for demonstrations and ward practice in the technics outlined didactically.

II. *History Taking and Elementary Clinics*

Later in the year, and as a continuation of the above work, the class is further introduced to methods and findings in physical diagnosis through attendance at elementary clinics. In these clinics selected cases are demonstrated to small sections with the intention of emphasizing points of distinction between normal and abnormal findings. Principles of history taking are made an integral part of this work. A total of 96 hours for Courses I and II.

III. *Pathological Physiology Conference*

A two-hour session each week during the second semester is devoted to a discussion and interpretation of the disturbed physiological and biochemical processes underlying disease. This is a correlation conference in which members of both clinical and preclinical departments take an active part. Selected cases are presented for study and discussion. 64 hours. *The Staff.*

THIRD YEAR:

I. *General Medicine*

Two to four hours weekly throughout the year are assigned to a textbook survey of general medicine. Emphasis is placed on the more common

disease conditions, full attention being given to their etiology, symptomatology, physical and laboratory findings. Collateral reading in current literature is required. 64 hours.

II. *Clinical Lectures in Medicine*

In addition to a textbook survey of medicine, one hour weekly is given to clinical lectures on selected problems in internal medicine at which time certain cases are presented for the demonstration of illustrative disease syndromes. The recognition and significance of such findings form the basis for the discussion. 32 hours.

III. *Tropical Medicine*

With the increasing participation of the United States in world-wide activities, tropical medicine assumes a new importance. Among the subjects covered in this division of medicine are malaria, the dysenteries, cholera, yellow fever, leprosy and yaws, trypanosomiasis, the leishmaniasis, schistosomiasis, filariasis, dengue and allied fevers. 16 hours. Dr. Cameron.

IV. *Medical Jurisprudence*

Lectures are given on the right to practice, contractual relations between physician and patient, the law of malpractice, legal aspects of the physician's duties under public health laws, autopsies and reports thereon, medico-legal aspects of certain crimes, expert testimony, insanity, and judicial toxicological investigations. 16 hours. Judge Grout.

V. *Clinical-Pathological Conferences*

These conferences, held two hours weekly throughout the year, are within the scope of the Pathological Physiology Conferences begun in the second year. In this particular phase of the work, more emphasis is placed on clinical findings. However, preclinical fundamentals are again reviewed and special attention is given to their practical applications. 64 hours. The Staff.

VI. *Physical Diagnosis (Ward Work)*

Small sections are assigned to the hospital wards and the Dispensary for the afternoon periods four days each week for practical work in history taking, physical examinations, and laboratory diagnosis. Suitable subjects are selected without distinguishing between medical and surgical cases. This prevents to some extent the prejudging of the diagnosis of the case as either medical or surgical and serves to bring out the fact that many medical cases have surgical aspects and that surgical problems likewise present difficulties from a medical point of view. While the assignments are made in small sections, the individual student carries on his own work

and is expected to do his clerkship in much the same manner as the fourth-year student, the only difference being that the third-year men are carefully supervised, and the cases are selected and graded to the scholastic experience of third-year students. *Approximately 336 hours. The Staff.*

FOURTH YEAR:

1. *Clinical Clerkships*

The work of this year is done in small sections at the several teaching hospitals where the students serve as clinical clerks. Patients are assigned for history taking, physical examination, and the necessary laboratory work. Demonstrations, conferences, and ward rounds are made by the Staff.

The sections are assigned in rotation at the Mary Fletcher, Fanny Allen, and Bishop DeGoesbriand Hospitals, and at the Dispensary. Students are variously assigned in residence for one month at the Vermont Sanatorium for tuberculosis in Pittsford, the Trudeau Sanatorium in Trudeau, New York, and at the Vermont State Hospital.

The section on City Service (domiciliary medicine) is also on service at the Dispensary during the clinic hours, and is resident in the building. Students on this service make house calls under the supervision of the City Physician. This is a general, twenty-four hour service, with a four-week assignment.

The medical staff supervises the sections in the various hospitals.

Supplementary work in clinical neurology is added while sections are on service at the Worcester City Hospital. The work includes ward rounds, conferences, and clinical clerkships on both inpatient and outpatient services. Approximately one third of the month in Worcester is devoted to this service. *Drs. Vibber and Arnold.*

Students are also assigned for clinical clerkships in Vermont hospitals outside of the Burlington area for services of one month. Each hospital arranges for supervision and teaching programs by staff members under the guidance of a preceptor.

DERMATOLOGY

THIRD YEAR:

Lectures and demonstrations are given covering etiology, diagnosis, and therapy of the more common skin diseases. Use is made of the projectoscope and lantern slide illustrations. *12 hours. Dr. Traub.*

Clinics are held at which students are assigned to patients in rotation for practice in history taking and method of procedure in examining patients. Emphasis is placed on the importance of being able to describe the manifestations of skin diseases in terms of the primary and secondary lesions of the skin. Each student demonstrates his case before the clinic where possibilities regarding diagnosis are discussed. An outline of proposed therapy completes the presentation. *30 hours. Dr. Traub.*

FOURTH YEAR:

Students attend the dermatology clinics at the Mary Fletcher Hospital and are assigned in rotation to attend the dermatology clinics at the Burlington Free Dispensary, held each Wednesday afternoon. *Dr. Traub.*

EXPERIMENTAL MEDICINE

The purpose of this Division is to arouse the interest of qualified students and post-graduates in investigative work in the field of medicine. Opportunity will be afforded such individuals to study clinical problems of importance, with active participation in the work done. The Division consists of a physiological-pharmacological and a biochemical laboratory. Plans are formulated for the establishment of a clinical observation unit with ten or more beds for the study of cardio-vascular diseases. This unit will be established in one of the local hospitals.

Special courses in elementary and advanced work in electrocardiography are offered.

At present the Division is investigating neurohormonal factors related to the pathogenesis and treatment of cardiovascular disease, the role of electrolytes in heart pathology, and biochemical factors in brain function.

NEUROLOGY

THIRD YEAR:

1. *Neurology*

The course is begun with a short review of the anatomy and physiology of the nervous system. The subject is then developed into clinical neurology by means of didactic and clinical lectures. Special attention is given to methods of discovery and the interpretation of physical findings. One hour weekly throughout the year. *32 hours. Dr. Upton.*

PEDIATRICS

SECOND YEAR:

1. *Principles of Pediatrics*

One hour a week in the second semester is given to an introduction to the principles of pediatrics. This introductory course includes a discussion of normal growth and development together with the principles of infant feeding. The purpose of this course is to give the student some introduction to the subject before he takes up ward work in pediatrics in his third year. *16 hours. Dr. Clark.*

THIRD YEAR:

1. *Principles of Pediatrics*

This course is a continuation of the work begun in the second year. In this particular course the subject matter continues with a discussion of the

diseases of infancy and childhood. Special attention is given to the measures for control of communicable disease. 32 hours. Drs. Corley and Corbin.

II. *Introduction to Clinical Pediatrics*

As a part of the plan for introducing third-year students to their clinical clerkships, one month is assigned to ward work in pediatrics. Instruction is carried out both individually and as a group, the section never numbering more than four. Here the students are given an introduction to the problems of history taking in pediatrics and the development of such information to its full significance. As a part of this program, special attention is also given to methods of physical examination and the interpretation of physical findings in pediatrics. Indications for, and the use of laboratory procedures important to individual cases are given full consideration. Adequate explanation of therapeutic measures indicated is included. 48 hours. The Staff.

III. *Neuropsychiatry of Childhood*

(This course is outlined under the Division of Psychiatry.)

FOURTH YEAR:

I. *Clinical Pediatrics*

Sections of four students each are assigned in rotation for a month as clinical clerks on the pediatrics services of the teaching hospitals in Burlington. Drs. Corley and Corbin.

PREVENTIVE MEDICINE AND PUBLIC HEALTH

SECOND YEAR:

I. *Introduction to Public Health*

Lectures, demonstrations, and field trips.

The course includes studies in venereal disease control, sanitation, ventilation, water purification, sewage disposal, meat and milk supply, administration and functions of health agencies, both public and volunteer, and their proper relation to public health. 28 hours, second semester. Drs. Brown, Foster, Aiken, and Mills, and Mr. Tracy.

II. *Oral Hygiene and Dental Medicine*

The course includes a review of the fundamentals of dental embryology and histology and a correlation of oral developmental anatomy with general developmental anatomy. The fundamentals of dental terminology are reviewed to afford the medical student an opportunity to become freely conversant in dental problems discussed with the dentist and dental interne with whom he will ultimately come in contact.

Lectures making use of lantern slides, models, charts, and moving pictures follow this introduction and include the discussion of dental problems associated with prenatal care, pediatrics (including the dental problems of the adolescent), and the dental and medico-dental problems of adulthood. As a prerequisite to a better understanding of the clinical demonstration of dental cases in the senior year, the diagnosis and treatment of oral pathology and the dental care of hospital patients is covered in the course of lectures. *4 hours, second semester. Dr. Taggart.*

THIRD YEAR:

I. Preventive Medicine

The course is based on a study of the principles of preventive medicine as applied both to private practice and public health. The didactic work includes demonstrations of means and methods employed in the prevention of infectious disease. Throughout the third year, students are assigned to the Vermont State Department of Health and the University Student Health Service for practical work in the field of Preventive Medicine and Immunology. *8 hours, first semester, Drs. Aiken, Benson and Brown.*

II. Industrial Preventive Medicine

This course is based on the study of the principles of preventive medicine as applied to occupational hygiene. It includes demonstrations of means and methods employed in industry. Practical demonstrations of the methods discussed are given at industrial plants. A major portion of the course deals with the prevention of occupational diseases. *8 hours, first semester. Dr. Aiken.*

III. Vectors in the Control of Diseases

This course is designed to give the student training in the field of disease transmission through various hosts. *8 hours, second semester. The Staff.*

IV. Voluntary Agencies in Public Health

The purpose of this course is to present to students the activities and programs of state and voluntary health agencies. Some of the fields covered are vocational rehabilitation, child and maternal health, speech and hearing corrective work, school health programs, public health nursing as well as the work of local visiting nurse associations, nutrition as a public health problem and similar health problems. Representatives of the various agencies present their programs with emphasis on the help available to practicing physicians and the need for cooperation. Seminars are also held in which the students present the social aspects of medicine, health insur-

ance, group practice and proposed legislation, which may bring about changes in medical practice. 8 hours, second semester. Visiting lecturers.

FOURTH YEAR:

I. Section Work

Inasmuch as the City Dispensary houses a number of health agencies, arrangements for work are such that sections on service there are in close contact with public and volunteer agencies engaged in health and welfare activities. Students on city service are necessarily dependent upon a close liaison with the Howard Relief, the Visiting Nurses Association, the Vermont Crippled Children's organization, the bureaus for maternal welfare and child hygiene, the Vermont Tuberculosis Association, the state program for the control of venereal disease, and the functions of the State Health Department. *The Staff.*

Students on pediatrics assignment in Burlington are assigned to oral hygiene clinics at the Burlington Dental Dispensary. The clinics are under the direction of the State's Oral Hygienist and are designed for the study of problems in oral disease both from a preventive and a therapeutic standpoint. Since the majority of patients seen in these clinics are referred through agencies engaged in child health, the students in many instances are able to follow their patients not only through the medical services but through the dental clinic as well. *Dr. Taggart.*

PSYCHIATRY

FIRST YEAR:

I. Medical Psychology

This is an introductory course in Psychobiology and Psychopathology. It includes a description of the psychobiological origins of the various personality reactions, together with the mental mechanisms underlying the development of mental disorders. First semester. 16 hours. *Dr. Thorne.*

SECOND YEAR:

I. Introductory Psychiatry

This includes a brief discussion of the development of a personality and the mental mechanisms involved. With this as a basis, consideration is given to the evaluation of the normal personality and an understanding of psychoneurotic and psychosomatic conditions. Second semester. 16 hours. *Drs. Chittick and Kelly.*

THIRD YEAR:

I. Psychiatry

The didactic lectures of this course consider the major mental dis-

orders, their incidence, etiological factors, pathology, symptomatology and treatment. First semester. 16 hours. Dr. Chittick.

At the Vermont State Hospital in Waterbury, clinical lectures and demonstrations are given illustrating various psychotic, psychoneurotic and psychosomatic conditions encountered in the practice of medicine. The students are expected to participate in the open discussion of such cases. Approximately 8 hours. Dr. Chittick and Staff.

II. Neuropsychiatry of Childhood

Lectures and discussions are offered on the recognition, etiology, prevention, and treatment of the various behavior and personality disturbances encountered in childhood and adolescence. Neurogenic, psychogenic, and psychosomatic factors are considered in an attempt to give the student a working concept of the totally functioning child. Second semester. 16 hours. Dr. Kundert.

FOURTH YEAR:

I. Clinical Psychiatry

Each student spends four weeks in residence at the Vermont State Hospital. This assignment includes ward rounds, history taking, assistance in therapeutic procedures used, and attendance at staff meetings and conferences.

Ward rounds and visits to the outpatient clinic in psychiatry are included in connection with the work in neurology at the Worcester City Hospital. On this particular service the student is given an introduction to certain phases of psychiatry not presented by the institutionalized patient. Drs. Vibber and Arnold.

DEPARTMENT OF MEDICAL ETHICS AND MEDICAL RELATIONSHIPS

RUPERT ADDISON CHITTICK, B.S., M.A., M.D., *Professor of Psychiatry*

HERBERT ASHLEY DUFEE, A.B., M.D., *Professor of Obstetrics*

OLIVER NEWELL EASTMAN, M.D., *Professor of Gynecology*

CHESTER ALBERT NEWHALL, A.B., M.D., *Associate Professor of Anatomy*

THIRD YEAR:

I. Principles of Medical Ethics and Medical Relationships

In presenting the principles of medical ethics and in discussing medical relationships, this course draws upon the historical backgrounds of medicine for the precedents of medical practice and then progresses to a discussion of the problems of modern medicine and current trends toward their solution. Full attention is paid to the problems of post graduate

medicine, beginning with internship and including a discussion of the relationships in which the physician may carry on his practice. One hour a week in the first semester. 8 hours. *Staff.*

II. Doctor-Patient Relationships

Under a grant from the Lamb Foundation, a general course in doctor-patient relationships is given.

The purpose of this course is to inculcate in the student a sense of the importance and the value of the manner in which patients are treated by practicing physicians in an attempt to restore to the practice of medicine some of the qualities of practice, exemplified by the competent, human family doctor.

This type of physician, more prevalent a generation ago than today, added to the practice of medicine a human touch frequently as valuable in promoting the patient's comfort, both physical and mental, as the drugs he dispensed and the procedures he recommended. This course is designed to emphasize the importance of this aspect of medical practice. *Staff and visiting lecturers.*

THE DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

HERBERT ASHLEY DUFEE, A.B., M.D., *Professor of Obstetrics, Chairman of Department*

OLIVER NEWELL EASTMAN, M.D., *Professor of Gynecology*

EDWARD DOUGLAS MCSWEENEY, A.B., M.D., *Assistant Professor of Gynecology*

WILLIAM JOSEPH SLAVIN, JR., B.S., M.D., *Assistant Professor of Clinical Obstetrics and Gynecology*

OLIVER ROLFE EASTMAN, B.S., M.D., *Instructor in Obstetrics and Gynecology*

JOHN VAN SICKLEN MAECK, B.S., M.D., *Instructor in Obstetrics and Gynecology*

JOHN BARKER DELONG, A.B., M.D., *Fellow in Obstetrics and Gynecology*

SECOND YEAR:

I. Introduction to Obstetrics

The course includes a discussion of the anatomy of the female pelvis and reproductive organs. This is followed by a consideration of the course and mechanism of labor together with an introduction to the management of normal labor, normal puerperium and lactation. 32 hours. *Drs. Dufee and Slavin.*

THIRD YEAR:

I. *Principles of Obstetrics*

The course begins with a discussion of the physiology of reproduction and associated endocrinology. This is followed by a study of the management of normal and abnormal pregnancies including toxemias. Further studies in abnormal labor include a consideration of operative obstetrics. Gross and microscopic pathology are presented through the cooperation of the Department of Pathology. Demonstrations are given of normal and abnormal labors on the manikin and by motion pictures. 96 hours. Drs. Durfee and Slavin.

Demonstration ward rounds, in sections. 24 hours. Drs. Slavin, Maeck, and Eastman.

II. *Principles of Gynecology*

Gynecological diseases are considered systematically, with special attention given to the more common disorders. In discussing treatment, the principal emphasis is placed on fundamentals and less stress is laid on operative technic. 32 hours. Drs. Eastman, Durfee, McSweeney and Slavin.

FOURTH YEAR:

I. *Clinical Obstetrics*

Students are assigned to section work for periods of one month. During term of assignment, students attend prenatal and postnatal clinics at the Burlington Free Dispensary and the Elizabeth Lund Home. Labors are attended at the Mary Fletcher Hospital, the Elizabeth Lund Home, and in the Outpatient Department. In each instance, patients are assigned to individual students who, under the supervision of a clinical instructor, act as labor clerks, taking histories, making general physical and obstetrical examination and keeping detailed records. The labor clerk observes or assists at the actual deliveries.

II. *Clinical Gynecology*

Students on the obstetrical assignment also serve as clinical clerks in gynecology on the gynecological service at the Mary Fletcher Hospital and at the gynecological clinic at the Burlington Free Dispensary. The plan is very much like that of other clinical clerkships in the fourth or senior year in that they are expected to work up their cases and follow them closely throughout the time spent under treatment or in the hospital. The plan for instruction further includes service ward rounds, assistance at operations in the hospital and assistance at diagnostic procedures in the hospital and at the clinic. Ample time and opportunity are allowed for close personal instruction in all instances. Drs. Eastman, Durfee, McSweeney and Slavin.

THE DEPARTMENT OF OPHTHALMOLOGY, OTOLARYNGOLOGY AND RHINOLOGY

JOHN CHARLES CUNNINGHAM, A.B., M.D., *Professor of Ophthalmology, Otolaryngology, and Rhinology, Chairman of Department*

KARL CORNELIUS McMAHON, B.S., M.D., *Assistant Professor of Otolaryngology and Rhinology*

PETER PAUL LAWLOR, M.D., *Assistant Professor of Otolaryngology and Rhinology*

MARSHALL COLEMAN TWITCHELL, JR., A.B., M.D., *Assistant Professor of Ophthalmology*

ELMER McREADY REED, B.S., M.D., *Instructor in Otolaryngology*

THIRD YEAR:

The course includes discussion of the diseases of the lids, conjunctiva, orbit, lacrimal apparatus, cornea, uveal tract and fundus.

Lectures and practical demonstrations of the use of the ophthalmoscope, headmirror, and other instruments used in the examination of ear, nose, and throat, and methods used in estimating the refraction, are given at the Mary Fletcher Hospital to half the class at a time. In this work the students are drilled in the various tests of routine examinations, every effort being made to demonstrate methods which, though simple, are adequate and call for the minimum outlay for equipment. Lectures and recitations on the common diseases of the nose, throat, and ear are included.

Lectures and recitations. 64 hours. *Drs. Cunningham and McMahon.*

FOURTH YEAR:

Clinical instruction is given Tuesday and Friday afternoons of each week from two to four o'clock at the Mary Fletcher Hospital outpatient clinic. Inpatient cases are also used for teaching. Treatments and methods of treatment are shown and explained. *Drs. Cunningham, McMahon and M. C. Twitchell, Jr.*

Clinical instruction is also given each week at the Bishop DeGoesbriand Hospital during ward rounds. *Dr. Cunningham.*

Sections assigned to the Fanny Allen participate in clinical work in this specialty.

THE DEPARTMENT OF PATHOLOGY

BJARNE PEARSON, B.S., M.B., M.D., M.S. (Med.), *Professor of Pathology, Chairman of Department*

ALEX BENJAMIN NOVIKOFF, B.S., M.A., PH.D., *Associate Professor of Experimental Pathology*

ERNEST STARK, B.S., M.D., *Assistant Professor of Pathology*

EPHRAIM WOLL, B.S., M.D., *Assistant Professor of Pathology*

ANCEL USHER BLAUSTEIN, B.S., M.D., C.M., *Instructor in Pathology*

JOSEPH WORCESTER SPELMAN, B.S., M.D., *Instructor in Pathology*

WILLARD FERGUSON ANGEN, B.S., M.D., LT. COL. (M. C.), U. S. A., *Fellow in Pathology*

GEORGE HENRY BRAY, M.D., *Fellow in Pathology*

ROBERT NOLAN CAIN, B.S., M.D., *Fellow in Surgery, assigned to Pathology*

CHARLES WILLIAM JONES, A.B., M.D., *Fellow in Pathology*

ARSEN MELKONIAN, A.B., M.D., *Fellow in Pathology*

HAROLD GORDON PAGE, B.S., M.D., *Fellow in Surgery, assigned to Pathology*

HENRY THOMAS TULIP, B.S., M.D., *Fellow in Urology, assigned to Pathology*

ROBERT JOHN HUBBARD, B.S., M.D., *Assistant in Pathology*

LEGRAND HENDRY THOMAS, B.S., M.D., *Assistant in Pathology*

SECOND YEAR:

1. *Pathology*

The course covers general pathology and a part of special pathology. A loan collection of slides is furnished to each student. This is supplemented by a large number of slides from autopsy and surgical material.

During the first semester the course covers the basic pathologic processes which include tissue injury and repair, inflammation, response to specific infectious agents, circulatory disturbances, retrogressive changes and neoplasia. An attempt is made to teach from a functional and biological standpoint.

During the second semester the course covers special pathology, which includes the study of heart and blood vessels, genito-urinary, hematopoietic, respiratory and gastro-enteric systems. Emphasis is placed here on dynamic interpretation and clinical correlation. In addition to the regular material many case histories with slides and gross material are used. One hour per week is assigned to a conference conducted jointly by the Departments of Pathology, Physiology and Medicine. At these conferences selected case

histories are discussed and an attempt made to explain the symptoms on the basis of altered anatomy, physiology and chemistry.

During both semesters gross fresh specimens from surgical and autopsy material and fixed and mounted material are demonstrated. The students are required to attend autopsies.

Conferences, demonstrations, lectures and laboratory eight hours per week the first semester and eleven hours per week the second semester. 304 hours. Drs. Pearson, Stark, Novikoff, Woll and Staff.

THIRD YEAR:

I. Pathology (Oncology)

Part of the course covers the pathology of the endocrines, bones and joints. The major portion of the time is devoted to the study of malignant disease in order to prepare the student more adequately for participation in the work of the tumor clinic and tumor seminars during the fourth year. The student is given a loan collection of slides. Emphasis is placed on a correlation of the fundamental disciplines of chemistry, endocrinology, genetics, and cytology with the current knowledge in the field of malignant disease. Experimental tumors in animals are demonstrated and the techniques involved. In addition to this fundamental knowledge, emphasis is placed on clinical correlations and applied problems.

Conferences, demonstrations, lectures, and laboratory work are given for three hours per week in the first semester. 48 hours. Drs. Pearson, Novikoff, Stark, Woll and Staff.

II. Clinical-Pathological Conferences

These conferences are held weekly throughout both semesters. Interesting cases are discussed by the clinician and pathologist. Gross material and lantern slides of microscopic sections of cases under discussion are presented. Two hours per week. 64 hours. Drs. Pearson, Stark, Woll and Staff.

GRADUATE STUDY IN PATHOLOGY

201. Advanced General Pathology

Fellows and Graduate Students are on call for the performance of autopsies. They are taught proper necropsy technique and are given progressive responsibility in their performance. Each case is properly worked up and recorded for clinicopathologic conferences. Disease processes are interpreted in relation to symptomatology and clinical findings. Requisite for major study, M.D. degree including one year of internship. 14 hours per week. Drs. Pearson, Woll, Stark, and Staff.

202. Advanced Surgical Pathology

Specimens removed from surgical operations and biopsies are studied and recorded. The technique of quick-frozen sections is taught. Requisite for

major study, M.D. degree including one year of internship. 18 hours per week. Drs. Pearson, Woll, Stark, and Staff.

203. Seminar in Pathology

The seminar in Pathology includes study of material of interest and problems that arise in general and surgical pathology. The current literature in the field is presented and discussed. Requisite for major study, M.D. degree including one year of internship. 3 hours per week. Drs. Pearson, Woll, Stark, and Staff.

204. Seminars in Growth and Malignancy

This includes a study of the fundamental underlying phenomena of growth and malignancy. It stresses the relationship to growth and malignancy of chemistry, enzymology, genetics, cytology and other fundamental disciplines. Open to properly qualified students. 3 hours every other week. Drs. Pearson, Novikoff and Staff.

205. Hematology

Special emphasis is placed on the interpretation of bone marrows in hematologic disease. Special hematologic techniques are taught. Hours to be arranged. Drs. Stark and Blaustein.

206. Research

This course is open to qualified graduate students. The results of original investigations will be used as basis for thesis required for degree of Master of Science. Credits and hours to be arranged. Drs. Pearson and Novikoff.

THE DEPARTMENT OF PHARMACOLOGY

NICHOLAS BERNARD DREYER, B.A., M.A., M.R.C.S., L.R.C.P., *Professor of Pharmacology, Chairman of Department*

EDWARD BYINGTON CRANE, A.B., M.D., *Instructor in Pharmacology*

JACQUELINE MCCORMICK, *Research Assistant in Pharmacology*

The course in Pharmacology is given in the second semester of the second year.

Pharmacology is taught from the standpoint of the actions and uses of drugs in the prevention and treatment of disease. The course consists of lectures supplementing textbook and library assignments; laboratory experiments and demonstrations in mammalian pharmacodynamics; special lectures by visiting experts in clinical therapeutics; motion picture medical teaching films; demonstrations by expert pharmacists; prescription writing exercises; discussion conference. The objectives of the course are to

provide a background of useful and basic pharmacological information, to correlate pharmacology with related preclinical and clinical medical sciences, and to emphasize the applications of pharmacodynamics to therapeutics.

Lectures, conferences and laboratory. *152 hours, second semester. Drs. Dreyer and Crane.*

Elective: Facilities are available to properly qualified students and others for research either independently or in cooperation with the members of the staff.

THE DEPARTMENT OF PHYSIOLOGY

FERDINAND JACOB MORRIS SICHEL, B.S.C., SC.M., PH.D., *Professor of Physiology, Chairman of Department*

ALFRED HAYES CHAMBERS, A.B., PH.D., *Assistant Professor of Physiology*

PAUL GREEN LEFEVRE, B.A., PH.D., *Assistant Professor of Physiology*

NANCY JOAN CANTOR, A.B., *Research Assistant in Physiology*

The course in Physiology covers a full academic year. The first half of the course is given in the second semester of the first year and the second half of the course in the first semester of the second year.

The course material is presented as a logical development of physiological concepts based on experimental evidence with a view to their ultimate clinical applications. The lectures are designed primarily to supplement the textbooks, particularly in respect to recent developments. The laboratories are equipped for experimental work and demonstrations illustrating and developing those physiological principles fundamental to clinical medicine. The laboratory work is directed toward quantitative determinations and evaluations, and includes a number of experiments on human subjects, as well as on other mammals.

FIRST YEAR:

The material covered in the first year includes the physiology of excitation, conduction, and contraction; blood, heart and circulation; and the special senses.

Lectures and conferences, *48 hours*, laboratory, *96 hours, second semester. Drs. Sichel, LeFevre and Chambers.*

SECOND YEAR:

The material covered in the second year includes the physiology of respiration, the central nervous system, secretion, digestion, excretion, water balance, energy metabolism, and reproduction.

Lectures and conferences, *64 hours*, laboratory, *48 hours, first semester. Drs. Sichel, LeFevre and Chambers.*

GRADUATE STUDY IN PHYSIOLOGY

*Graduate Courses*201. *Special Problems in Physiology*

This course, open to qualified students by arrangement with the staff, will cover various special problems by means of lectures, seminars, and directed readings. *Hours to be arranged.*

202. *Special Problems in Biophysics*

This course, open to qualified students by arrangement with the staff, will include lectures, seminars, and directed readings on current problems in Biophysics and Medical Physics. *Hours to be arranged.*

203. *Research*

Properly qualified students may arrange to use the facilities of the department for investigations in Physiology or Biophysics, either independently or in cooperation with the members of the staff.

THE DEPARTMENT OF SURGERY

ALBERT GEORGE MACKAY, B.S., M.D., *Professor of Surgery, Chairman of Department*

WALFORD TUPPER REES, M.D., *Professor of Clinical Surgery*

JOHN ABAJIAN, JR., M.D., *Associate Professor of Anesthesia*

KEITH FRANK TRUAX, B.S., M.D., *Assistant Professor of Surgery*

ARTHUR GLADSTONE, B.S., M.D., *Assistant Professor of Clinical Surgery*

ARTHUR RUSH HOGAN, A.B., M.D., *Assistant Professor of Clinical Surgery*

LOUIS GEORGE THABAULT, M.D., *Instructor in Surgery*

ALBERT JAMES CRANDALL, B.S., M.D., *Instructor in Clinical Surgery*

JOHN FREDERICK LYNCH, B.S., M.D., *Instructor in Clinical Surgery*

ROBERT NOLAN CAIN, B.S., M.D., *Fellow in Surgery*

GINO ALDO DENTE, M.D., *Fellow in Anesthesia*

CARLETON RAYMOND HAINES, B.S., M.D., *Fellow in Surgery*

DONALD HOLDEN HARWOOD, B.S., M.D., *Fellow in Anesthesia*

HENRI LOUIS PACHE, B.S., M.D., *Fellow in Surgery*

HAROLD GORDON PAGE, B.S., M.D., *Fellow in Surgery*

WILLIAM IRELAND SHEA, A.B., M.D., *Fellow in Surgery*

DIVISION OF NEUROSURGERY

RAYMOND MADIFORD PEARDON DONAGHY, B.S., M.D., *Associate Professor of Neurosurgery*

LESTER JULIAN WALLMAN, A.B., M.D., *Instructor in Neurosurgery*

DIVISION OF ORTHOPEDIC SURGERY

JOHN FRYE BELL, A.B., M.D., *Associate Professor of Orthopedic Surgery*

DAVID MARSH BOSWORTH, A.B., M.D., *Consultant in Orthopedic Surgery*

ROBERT LELAND MAYNARD, M.D., *Assistant Professor of Orthopedic Surgery*

CHARLES BRUSH RUST, M.D., *Instructor in Orthopedic Surgery*

DIVISION OF RADIOLOGY AND PHYSICAL THERAPY

ARTHUR BRADLEY SOULE, JR., A.B., M.D., *Professor of Radiology*

OSCAR SYLVANDER PETERSON, JR., M.D., *Assistant Professor of Radiology*

FREDERICK WILLIAM VAN BUSKIRK, A.B., M.D., *Assistant Professor of Radiology*

DONALD WALTER HUMPHREYS, B.S., M.D., *Fellow in Radiology*

EDWARD JOSEPH SENNETT, PH.B., M.D., *Fellow in Radiology*

DONALD WILLIAM SAMPSON STIFF, A.B., M.D., *Fellow in Radiology*

DIVISION OF UROLOGY

WINTHROP MAILLOT FLAGG, M.D., *Associate Professor of Urology*

LESTER MAHAN FELTON, B.S., M.D., *Assistant Professor of Clinical Urology*

LOUIS WILLIAM ESPOSITO, B.S., M.D., *Instructor in Urology*

ALDO GINO FRANCESCHI, M.D., *Instructor in Urology*

NICHOLAS SALVATORE SCARCELLO, M.D., *Instructor in Clinical Urology*

GEORGE CHANDLER TULLY, B.S., M.D., *Instructor in Clinical Urology*

PAUL KINGSTON LARNER, B.S., M.D., *Fellow in Urology*

HENRY THOMAS TULIP, B.S., M.D., *Fellow in Urology*

FLETCHER HOWARD WHITE, M.D., *Fellow in Urology*

SECOND YEAR:

I. *Fractures and Dislocations*

Besides a routine covering of the ordinary fractures and dislocations, with the necessary diagnostic steps, including x-ray, and the various procedures for their proper reduction, there is a demonstration of apparatus and its application. The occasional advisability of open reduction and internal fixation is made clear, with its dangers and advantages. The necessity of temporary splinting before transportation is insisted upon. A weekly review of all fracture cases admitted to the Mary Fletcher Hospital is made, with particular emphasis on the cause of displacement and treatment. X-ray films are used extensively. 16 hours. Dr. Maynard.

II. General Surgery

An introduction to soft tissue surgery which will stress case presentations as a basis for the covering of routine surgical subjects. Textbook and library reading will be assigned, and recitations will be utilized, as well as lectures. An effort is made to correlate the clinical subjects with the basic subjects such as Anatomy, Chemistry, Physiology, Bacteriology and Pathology.

The topics covered are: inflammation and repair, burns, wounds, infections and injuries to or diseases of the tendons, muscles and ligaments, bursae, vascular and lymphatic systems, osteomyelitis, and amputations; also aseptic surgical technique and minor surgical procedures. 48 hours. Drs. Gladstone and Thabault.

III. Emergency Treatment

A careful review of all probable emergency situations is covered in this course, which prepares the medical student fairly early in his undergraduate course to be helpful in the case of any emergency. This embraces a discussion of splints, dressings, bandaging and transportation. 16 hours. Dr. Lynch.

THIRD YEAR:

I. General and Regional Surgery

Dry clinics, with the presentation of patients, form the basis for the teaching of the major part of soft tissue surgery, which is covered in this course. Case presentations are supplemented with lecture and quiz. Pre-requisite reading of journals and textbooks is expected. Differential diagnosis and therapy is emphasized, although operative technique is minimized. 80 hours. Drs. Mackay, Rees and Truax.

II. Surgical Anatomy

This course is, to some extent, a review of the students' previous anatomical studies, with the special object of showing anatomical relationships in the more usual surgical operations such as those for hernia, appendicitis, cholecystitis, thyroidectomy, infected hands, and so forth. 12 hours. Dr. Gladstone.

III. Anesthesiology

The object of this course is to give the student a theoretical knowledge of the subject before he gives anesthetics (under supervision) during his fourth year. The physiology and pharmacology of anesthetics and patient under anesthesia are stressed. 16 hours. Dr. Abajian.

IV. *Clinical-Pathological Conferences*

These conferences are supervised by various members of the Medical, Surgical, and Pathological Departments, and are included in the text of the Departments of Medicine and Pathology. *64 hours.*

V. *Rectal Diseases*

A clinical demonstration and discussion of diseases of the anus and rectum, is held at the Mary Fletcher Hospital during the first eight weeks of the first semester. *8 hours. Dr. Gladstone.*

VI. *Tumor Clinic*

Every Wednesday a tumor clinic is held at the Mary Fletcher Hospital under the direction of the faculty of the College of Medicine. Patients are examined by members of the faculty representing all clinical departments of the College. Sections of third and fourth year students assist in examining patients and receive the benefit of close observation of a large group of patients under treatment for malignant disease. Through the facilities of the Vermont State Cancer Commission, a close follow-up is obtained on all patients enrolled in the tumor clinic. The attending surgeon on duty at the Mary Fletcher Hospital acts as instructor at the Tumor Clinic for the time of his active service. *Drs. Mackay, Rees, Truax and Gladstone.*

FOURTH YEAR:

I. *Sections*

The class is divided into sections which work under the supervision of the surgical teachers. The students act as clinical clerks and assistants at the Mary Fletcher, Bishop DeGoesbriand, and Fanny Allen Hospitals, and in the Dispensary or on City Service, rotating in their appointments. The section at the Mary Fletcher Hospital meets daily for instruction by the full-time staff, and also meets once a week for a surgical clinic, paper clinic, or discussion, with Dr. Mackay. *320 hours. Dr. Mackay and Staff.*

II. *Clinical Anesthesiology*

Fourth year students in rotation are given practical instruction in anesthesia at the Mary Fletcher Hospital. *Dr. Abajian.*

III. *Endoscopy*

Every Monday at 11 a.m. a clinic is held for senior students which includes laryngoscopy, bronchoscopy, esophagoscopy, and gastroscopy, at the Mary Fletcher Hospital. *Dr. Mackay.*

NEUROSURGERY

THIRD YEAR:

One hour weekly during the second semester is given to a discussion of diseases of the nervous system, augmented by clinical case presentation. 16 hours. *Dr. Donaghy.*

FOURTH YEAR:

Case work and ward rounds are held under the direct supervision of the Neurosurgical Division.

ORTHOPEDIC SURGERY

THIRD YEAR:

The didactic and clinical course is held at the Mary Fletcher Hospital Saturday mornings. *Staff.*

FOURTH YEAR:

Clinics, followed by ward rounds, are held Saturday mornings. Informal discussion of cases is given by staff members.

In cooperation with the Crippled Children's Division of the State Department of Health, orthopedic cases under their care are shown on Monday afternoons.

RADIOLOGY AND PHYSICAL THERAPY

FIRST YEAR:

I. *Introduction to Radiology*

Lectures and demonstrations in conjunction with Departments of Physiology and Anatomy. Physics and general principles of radiology; normal roentgen anatomy and physiology; fluoroscopic demonstrations of chest. 8 hours. *Dr. Soule.*

SECOND YEAR:

I. *Radiology*

Continuation of fluoroscopic and roentgenographic demonstrations in conjunction with Departments of Physiology and Anatomy.

Effects of radiation on normal and abnormal tissues; radiosensitivity; radiotherapy. Lectures given by arrangement with the Department of Pathology. 2 hours. *Dr. Peterson.*

THIRD YEAR:

I. *Radiology*

Diagnostic and therapeutic radiology; lectures and demonstrations one hour weekly through the year, covering the diagnosis of abnormalities of

the skeletal system, alimentary tract, urinary tract, central nervous system; considerations of the use of x-ray and radium in the treatment of neoplasms, endocrine disturbances, and inflammatory lesions. 32 hours. Drs. Soule, Peterson and Van Buskirk.

II. Radiology Section Work

One section of four to six students spends two afternoons a week for four weeks in the radiology department of the Mary Fletcher Hospital. Students thus have an opportunity to observe the use of radiologic procedures in medical practice. Drs. Soule, Peterson and Van Burkirk.

III. Physical Therapy

Lectures on the physics and general principles of physical therapy, including dry and moist heat, massage and manipulation, ultra-violet and infra-red rays. Indications and contra-indications and methods of applications of each. 8 hours. Dr. Peterson.

FOURTH YEAR:

I. Radiology Conferences

Weekly conferences on general radiological problems are held by sections, three hours weekly. Students witness the interpretation of radiographic material and are given opportunity to discuss findings and methods. 96 hours. Drs. Soule, Peterson and Van Buskirk.

UROLOGY

THIRD YEAR:

One hour weekly during the second semester is given to a discussion of the diseases of the genito-urinary system. 16 hours. Dr. Flagg.

FOURTH YEAR:

I. Urology and Venereal Diseases

Sections of four students each spend a month in Worcester, Massachusetts, where each day is given to clinical clerkships in the Department of Urology at the Worcester City Hospital. The work is divided equally between inpatient and outpatient services. The outpatient service includes attendance at the City Clinic for Venereal Diseases. Dr. Felton.

Work in Burlington includes ward rounds, dispensary, outpatient clinic, and observations of the urological service of the Mary Fletcher Hospital. Dr. Flagg.

DEPARTMENT OF MILITARY SCIENCE AND TACTICS

SENIOR UNIT—R. O. T. C. (MEDICAL CORPS)

JAY EDWARD GILLFILLAN, COLONEL, INFANTRY, U.S.A., *Professor of Military Science and Tactics*

WILLARD FERGUSON ANGEN, LT. COLONEL, M.C., U.S.A., *Assistant Professor of Military Science and Tactics, Medical Section, Reserve Officers' Training Corps*

The University maintains a Senior Unit ROTC Medical Corps, for those students who desire to secure appointment as Medical Officers in the Medical Section Organized Reserve Corps, U. S. Army.

All regularly enrolled students in the College of Medicine who meet certain War Department qualifications are eligible for membership in the courses.

Enrollment is voluntary on the part of the student. Qualifications for enrollment include physical fitness, successful passing of General Survey and Screening tests and acceptance by the Professor of Military Science and Tactics after conference with the Dean of the College of Medicine and the President of the University.

The program of instruction is divided into two phases, the Elementary Course and the Advanced Course, each of two years' duration, plus a summer camp period of six weeks, normally held between the Sophomore and Junior academic years. The Elementary Course requires 90 hours per academic year, divided into 32 hours of military subjects closely allied to medical problems, and 58 hours of technical medical subjects as prescribed by the curricula of the College of Medicine.

It is a preparation for the summer camp period and a prerequisite for the Advanced Course, except for veterans meeting Service Exemption requirements. The Advanced Course is a continuation of the Elementary Course, with similar hours and subject matter except that emphasis is placed upon Tropical Medicine, Orthopedic Surgery, Military Surgery, and Military Medicine.

Upon completion of the program, the summer camp, and the award of the degree of Doctor of Medicine, the student is eligible for appointment as a First Lieutenant, Medical Corps, Organized Reserve Corps, U. S. Army.

Students enrolled in the Advanced Course are paid a subsistence allowance equal to the value of the garrison ration during the academic year, not to exceed 570 days for the two years. During the fiscal year 1949 this subsistence allowance is \$1.05 per day and is paid monthly to the student. Uniform is not required.

Students are paid at the rate of an enlisted man of the 7th grade while in attendance at summer camp, plus mileage at 5c per mile to and from the University.

All of the above emoluments are in addition to allowances under Public Law 346 (the G. I. Bill of Rights).

SUMMARY OF STUDIES 1948-49

CLASSROOM AND LABORATORY HOURS

<i>First Year</i>	<i>Hours</i>	<i>Third Year</i>	<i>Hours</i>
Anatomy	336	Anatomy (Surgical)	12
Histology	128	Pathology	48
Embryology	32	Clinical-Pathological Conferences	64
Neuro-anatomy	96	Physical Diagnosis (ward work)	336
Biochemistry (Introduction to)	24	Medicine	96
Biochemistry	192	Industrial and Preventive Medicine	48
Physiology	144	Surgery	80
Radiology (Introduction to)	8	Obstetrics (Principles of)	120
Library Course	8	Anesthesiology	16
Bacteriology	176	Dermatology	42
Medical Psychology	16	Eye, Ear, Nose and Throat	64
Military Medicine (elective, 1 hr. per week)	Gynecology (Principles of)	32
Total hours	1,160	Medical Jurisprudence	16
<i>Second Year</i>	<i>Hours</i>	Medical Ethics and Relationships	8
Anatomy	48	Neurology	32
Clinical Pathology	128	Neuropsychiatry of Childhood	16
Pathology	304	Pediatrics	80
Pharmacology	152	Orthopedics	32
Physiology	112	Psychiatry	24
Pathological-Physiology Conferences	64	Proctology	8
Public Health and Hygiene	32	Radiology and Physical Therapy	40
Medicine (Physical Diagnosis and History Taking)	96	Urology	16
Surgery	88	Tropical Medicine	16
Obstetrics (Introduction to)	32	Military Medicine (elective, 1 hr. per week)
Pediatrics	16	Total hours	1,246
Radiology	2		
Psychiatry (Introduction to)	16		
Military Medicine (elective, 1 hr. per week)		
Total hours	1,090		

The senior, or fourth year schedule calls for full time in clinical work. Obviously it is impossible to set a rigid hour limit on work done in this year. In round numbers, however, the time scheduled is forty hours per week for thirty-two weeks, a total of 1,280 hours.

GRADUATES—DOCTORS OF MEDICINE

JUNE 1948

Edwin Brown Adams, B.S., M.S.	Burlington
Arthur Joseph Barker	Somerville, Mass.
Seymour James Baum, A.B.	Bridgeport, Conn.
Alexander Eli Bayer, B.S.	New Britain, Conn.
John Douglas Boardman, B.A.	Burlington
Shirley Rose Boulanger, B.S., M.S.	Hanson, Mass.
Heath Douglas Bourdon	Claremont, N. H.
Edward Stillman Bundy, A.B.	Southington, Conn.
Wallace Frederick Buttrick, A.B.	Burlington
Eugene Robert Chisholm, A.B.	Montpelier
Herbert Ashley Durfee, Jr., B.S.	Burlington
Karl Wayne Erwin, B.S.	Burlington
William Thomas Fagan, Jr., B.S.	Rutland
Stanley Samuel Fieber, B.S.	Brooklyn, N. Y.
Leo Paul Giardi, B.S.	Hartford, Conn.
Julian John Goodman, B.S.	Boston, Mass.
Paul Edward Griffin	Herkimer, N. Y.
Don Allen Guinan, B.A.	Northampton, Mass.
Anne Weld Hebblethwaite, B.A.	Burlington
Raymond Dyer Higgins, Jr., B.A.	Dennysville, Me.
Lloyd Malcolm Horlick, B.S.	Everett, Mass.
Roderick Julius Humphreys, B.S.	Bennington
Edwin Francis Jones	Oakland, Calif.
Milton Reuben Kaufman, A.B.	Mountaindale, N. Y.
Cecil Harry Kimball	Burlington
James Andrew Long, A.B.	Brandon
Donald Jude MacPherson	Lynn, Mass.
Edwin David Meyers, B.S.	Manchester Depot
John Robert Morris	Youngstown, O.
Edward Brian Nolan	Newton Highlands, Mass.
Malcolm Jack Paulsen, B.S.	Danville
George Lewis Saiger, B.S.	Burlington
James William Tierney, B.S.	Norwalk, Conn.
William Loren West, B.S.	Shelton, Conn.
Royce Ernest Whittier, B.S.	Concord, N. H.
Betty May Young, B.S.	Baltimore, Md.

DOCTORS OF MEDICINE—CUM LAUDE

Cleveland Ray Denton, B.S.	Burlington
Winston Earle Cochran, B.S.	Morrisville
Michael G. Marra, B.S.	Burlington
Thomas Wyckoff Williams, B.S.	N. Sutton, N. H.
Paul Leonard Schoenberg, A.B.	New York, N. Y.

P R I Z E S

JUNE 1948

CARBEE PRIZE

For greatest proficiency in the subject of Obstetrics

Michael G. Marra, B.S.

WOODBURY PRIZES IN MEDICINE

For greatest proficiency in Clinical Work in senior year

Winston Earle Cochran, B.S.

*To the sophomore having the highest standing for two years
of Medical Work*

Elizabeth Fannie Drake, B.S.

NU SIGMA NU MERIT AWARD

To the outstanding student in the junior class

Richard Emile Bouchard

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INTERNSHIP APPOINTMENTS

GRADUATES, JUNE 1948

Edwin B. Adams	Queen's Hospital, Honolulu, Hawaii
Arthur J. Barker	Cambridge City Hospital, Cambridge, Mass.
Seymour J. Baum	Bellevue Hospital, New York City
Alexander E. Bayer	St. Francis Hospital, Hartford, Conn.
John D. Boardman	St. Mary's Hospital, Brooklyn, N. Y.
Shirley R. Boulanger	Quincy City Hospital, Quincy, Mass.
Edward S. Bundy	Vassar Brothers Hospital, Poughkeepsie, N. Y.
H. Douglas Bourdon	Worcester City Hospital, Worcester, Mass.
Wallace F. Buttrick	U. S. Naval Hospital, Philadelphia, Pa.
Eugene R. Chisholm	Franklin Hospital, San Francisco, Calif.
Winston E. Cochran	Mary Fletcher Hospital, Burlington
Cleveland R. Denton	University Hospital, Ann Arbor, Mich.
Herbert A. Durfee, Jr.	Lenox Hill Hospital, New York City
Karl W. Erwin	Wayne County General Hospital and Infirmary, Eloise, Mich.
William T. Fagan	Mary Fletcher Hospital, Burlington
Stanley S. Fieber	King's County Hospital, Brooklyn, N. Y.
Leo P. Giardi	St. Francis Hospital, Hartford, Conn.
Julian J. Goodman	Newark Beth Israel Hospital, Newark, N. J.
Paul E. Griffin	St. Francis Hospital, Hartford, Conn.
Don A. Guinan	California Hospital, Los Angeles, Calif.
Mrs. Anne W. Hebblethwaite	None
Raymond D. Higgins	Maine General Hospital, Portland, Me.
Lloyd M. Horlick	Salem Hospital, Salem, Mass.
Roderick J. Humphreys	Mary Fletcher Hospital, Burlington
Edwin F. Jones	Bishop DeGoesbriand Hospital, Burlington
Milton Kaufman	Lincoln Hospital, Bronx, N. Y.
Cecil H. Kimball	Fitzsimmons General Hospital, Denver, Colorado
James A. Long	Mary Fletcher Hospital, Burlington
Donald J. MacPherson	U. S. Naval Hospital, Chelsea, Mass.
Michael G. Marra	Luther Hospital, Eau Claire, Wis.
Edwin D. Meyers	Cedars of Lebanon Hospital, Los Angeles, Calif.
John R. Morris	Presbyterian Hospital, Pittsburgh, Pa.
Brian E. Nolan	St. Mary's Hospital, Brooklyn, N. Y.
Malcolm J. Paulsen	Orange County General Hospital, Orange, Calif.
George L. Saiger	Marine Hospital, Cleveland, Ohio
Paul L. Schoenberg	Mt. Sinai Hospital, New York City
James W. Tierney	Norwalk General Hospital, Norwalk, Conn.
William L. West	Rhode Island Hospital, Providence, R. I.
Royce E. Whittier	Orange County General Hospital, Orange, Calif.
Thomas W. Williams	Mary Fletcher Hospital, Burlington
Betty M. Young	Maryland General Hospital, Baltimore, Md.

REGISTER—1948-1949

FOURTH YEAR:

Richard Emile Bouchard *Bridgeport, Conn.*
Constance Wheeler Brownell, B.S. *Burlington*

James Arthur Bulen *Escondido, Calif.*
Leonard Vincent Crowley *Binghamton, N. Y.*

Michael Paul Dacquisto *Pelham, N. Y.*
Anthony Louis Danza, A.B. *Brooklyn, N. Y.*

Earle Marshall Davis *Reading, Mass.*
Ernest Russell Deitch *Kirkville, Iowa*
Harry Edwin Eaton *Willimantic, Conn.*
John Michael Fiore, B.S. IN MED. *Brooklyn, N. Y.*

Joseph Clayton Foley, B.S., M.A. *Pittsford*
Noel Charles Galen *New York, N. Y.*
Robert Dore Gittler *New York, N. Y.*
Charles Henry Goyette, Jr. *Barre*
Irene I-lien Hsu, B.S. *Tientsin, China*
Robert John Jake *Milwaukee, Wis.*
Bernard Joseph Kaplan, B.S. *Hartford, Conn.*

Elton Benjamin Lahar, B.S. *Concord, N. H.*

Patrick Francis McCormack, Jr. *West Rutland*

John James McCutcheon, Jr. *Sherburne Ctr.*
Arthur William McMahon, Jr. *Portsmouth, N. H.*

Harold John Malone, A.B. *New Britain, Conn.*

Carlton Dean Marshall *Orleans*
Nathan Masin, B.S. IN MED. *Bronx, N. Y.*
Carmen Mary Pallotta, B.S. *Ludlow*
Richard Edward Pease *Rutland*
Hannah Hildreth Pendergast *Boise, Idaho*
Frank Ivan Pitkin *Montpelier*
Earle Winslow Rice, B.S. *Worcester, Mass.*
Donald Edward Rock *Ludlow*
Leo James Schildhaus, B.S. *Burlington*
Edward Silliman Sherwood *Mt. Vernon, N. Y.*

Eunice Marie Simmons, A.B. *Montpelier*
Harriet Theresa Sullivan *Brooklyn, N. Y.*
Eugene Randolph Tompkins, Jr. *Hartford, Conn.*

THIRD YEAR:

Mary Louise Bertucio, A.B. *Springfield, Mass.*
Mary Patricia Brayton, B.S. *Poultney*
Allen Bandes Carter, A.B. *Poughkeepsie, N. Y.*

Pauline Elizabeth Clarke, A.B. *Stowe*
Roger William Cooper, A.B. *Essex Jct.*
Peter Stanley Czachor, B.S. *W. Rutland*
Simon Dorfman *Biddeford, Me.*
Charles Francis Drake *Chicago, Ill.*
Elizabeth Fannie Drake, B.S. *Middlebury*
Peter Floreal Esteran, B.S. *Barre*
Louis Fishman, B.S. *Burlington*
Edward Esau Friedman, A.B. *Moretown*
Norman Oscar Gauvreau, B.S. *Lewiston, Me.*
Jack Jay Goldman, A.B. *Burlington*
Karl Kenneth Grubaugh, A.B., M.A. *Burlington*

Philip Ross Hastings, B.S. *Bradford*
Joel Thomas Janvier, A.B. *Mariposa, Calif.*
Gerald Joseph Jerry, A.B. *Winooski*
Llewellyn Martin Jones, A.B. *Swanton*

Aristides Demetrios Julius *Brooklyn, N. Y.*
Harry Philip Levine, B.S., M.S. *Burlington*
Julian Levine, B.S. *Burlington*
Gerald Francis McGinniss, A.B. *Bellows Falls*
Jane Frances McNeill, A.B. *Beacon, N. Y.*
Richard Charles Manjoney, B.S. *Bridgeport, Conn.*

Charles Frederick Miller *Proctor*
Leo Albert Moreau, B.S. *Taunton, Mass.*
Robert James Moriarty, B.S. *Burlington*
Olive Mae Morris, A.B. *Poultney*
Lawrence James Parker *E. Poultney*
Alfred Edward Peterson, A.B. *Montclair, N. J.*

Albert Adelard Poulin, Jr., B.S. *Rumford, Me.*

Charles Franklin Ryan, B.S. *Vergennes*
Howard Simon Stein, A.B. *Brooklyn, N. Y.*
Marjorie Joy Topkins, A.B. *Brooklyn, N. Y.*
Vita Vileisis (Mrs.) *Naugatuck, Conn.*
Emanuel Wiedman, B.S. *Burlington*

SECOND YEAR:

Lawrence Bernard Ahrens, B.S. *Burlington*
 Anthony Moymore Alberico, B.S.

Burlington
 Deal Tabor Aseltine, Jr., B.S.
Essex Junction

Laurence Havens Ballou, A.B. *Chester*
 Ernest Stanley Barash, A.B. *Brooklyn, N. Y.*
 Frank Lewis Bartlett, B.S. *Burlington*
 Edwin Pitcher Bassett *Rutland*

James Paul Burke, B.S. *Barre*
 Jack Wallace Conklin, A.B. *Providence, R. I.*
 Virginia Henrietta Donaldson, A.B.

Washington, D. C.
 James Edgar Downs *Cadyville, N. Y.*
 John William Edward Durkin, Jr.

Poultney
 Richard Milton Esser, A.B.
Mt. Vernon, N. Y.

Morton Howard Frank, A.B.
Portland, Me.

Fred Arthur Harrington, B.S. *Rutland*
 Annora Harris *South Shaftsbury*
 John Robert Heckman *Castleton*
 Philip James Hincks, B.S. *Middlebury*
 Edward William Jenkins, B.S. *Burlington*

Allen Tewksbury Jones, B.S. in ED. *Morrisville*

Edward Albert Kamens, A.B. *Bridgeport, Conn.*
 Nina Koureshoff, A.B. *New York, N. Y.*
 Reginald Frederick Krause, A.B., M.S., PH.D. *Burlington*

John Clifford Lantman, B.S. *Hinesburg*
 Murdo Glenn MacDonald, B.S.

South Ryegate
 Thomas Maxwell McGarry, B.S. *Rutland*
 Frances Anne Phillips, A.B. *Milford, Pa.*
 James Thomas Riley *Burlington*
 Henry Thomas Rondeau, A.B.

N. Brookfield, Mass.
 Elmer Corliss Sanborn *Bellows Falls*

Eric George Schweiger *New York, N. Y.*
 Harley Grupe Shepard, B.S. *S. Burlington*
 William Judah Sohn, A.B. *Brooklyn, N. Y.*
 Robert Kirk Ward, B.S. *St. Albans*

Henry Wasserman, A.B. *Yonkers, N. Y.*
 Seymour Paul Weissman, B.S. *Budd Lake, N. J.*

Edward Kenneth Welch, B.S. *Hyde Park, Mass.*

FIRST YEAR:

Henry Chester Baltrucki *Gardner, Mass.*
 Irwin William Becker, A.B. *Burlington*

Edward Abraham Boyarsky *Burlington*
 Mitchell Bresnehan Carey *Ludlow*

Harlan Paul Casavant, B.S. *Waterbury*
 Paul Edward Corley, B.S. *Burlington*

Marvin Lee Cousins, B.A. *New Haven, Conn.*

Richard Herbert Dolloff, A.B. *Peabody, Mass.*

William Arthur Eddy W. *Hartford, Conn.*
 Marvin Garrell, A.B. *Port Chester, N. Y.*

Theodore Herzl Goldberg, A.B. *Westwood, N. J.*

Cornelius O. Granai, Jr. *Barre*
 Irvin McKee Graves *Bellows Falls*

Harry Elwin Howe, A.B., M.ED. *Tunbridge*
 Luke Amos Howe *Tunbridge*

Robert Jacob Hunziker, A.B. *Poultney*
 Martin Jonas Koplewitz, B.S.

Far Rockaway, N. Y.
 Raymond Paul Koval, B.A. *Paterson, N. J.*

Arthur Saul Kunin, A.B. *Brooklyn, N. Y.*
 Daniel Germain Lareau *Winooski*

Joseph Roland Marcel Leclerc, B.A., B.S. *Montreal, Canada*

Albert Brownold Lowenfels *White Plains, N. Y.*

Gordon Manson, B.A. *Burlington*
 Brewster Davis Martin *Pittsfield*

Avron Herbert Maser, B.S. *Washington, D. C.*

Cedric Llewellyn Mather, A.B., S.T.B. *Burlington*

Stanley Roland Merritt *Rutland*
 Edward Cyprian Nash, A.B.

N. Bennington
 Murray Nussbaum *Brooklyn, N. Y.*

Arthur Jason Perelman *Newark, N. J.*
 Charles Harold Perry, Jr. *Plainfield*

Paul Allan Prior, A.B. *St. Albans*
 Novello Egidio Ruggiero *Waterbury, Conn.*

Stanley Schilling, B.S. *Middlebury*
 George Allen Segal *Bennington*

Wendell Anthony Stimets, A.B. *Highgate Center*

Robert Moran True, A.B. *Freeport, Me.*
 John Alexander Warden *Bluefield, W. Va.*

Jack Carlton White *West Chester, Pa.*
 Clifford Keith Wilbur, Jr., B.S. *Westbrook, Me.*

VERMONT DEPARTMENT OF PUBLIC HEALTH

State Board of Health: Clarence H. Burr, M.D., Montpelier, Chairman; Robert W. Ballantyne, M.D., M.P.H., Windsor; Arthur Bradley Soule, Jr., M.D., Burlington; Robert B. Aiken, M.D., M.P.H., Secretary and Executive Officer, Burlington; Francis Lawler, Sc.D., Director of Laboratory; E. L. Tracy, Director of Sanitary Engineering Division; W. B. Farnham, M.S., Chief Chemist; H. W. Slocum, A.B., Director Tuberculosis Division; Lillian E. Kron, R.N., Crippled Children's Division; Nellie M. Jones, R.N., Public Health Nursing; Viola Russell, M.D., Director, Maternal and Child Health; Harry Ashe, Director of Industrial Hygiene; F. S. Kent, M.D., Director, Communicable Disease Division.

The State Board of Health is responsible for the public health work of the State, including the control of communicable diseases, supervision of food and drug supplies, supervision of public water supplies, and sewage disposal, sanitation of schoolhouses and public buildings, inspection and licensing of hotels, restaurants, tourist houses, and bakeries, abatement of nuisances, educational work against tuberculosis, control of venereal diseases, physical rehabilitation of crippled children, and registration of vital statistics.

The State Board of Health cooperates with the College of Medicine in its teaching program in the fields of Preventive medicine and Public Health. The building, where the State Board of Health maintains part of its staff and laboratories, is located next door to the College of Medicine. Staff members from the State Board of Health give instruction to students in the College of Medicine.

In cooperation with 68 towns in the State, the State Board of Health maintains 15 generalized public health nursing units. State-wide public health nursing service in the specialized fields of tuberculosis and venereal diseases is also provided. These services are used as a means of educating the future practicing physicians in the need for such services and the manner in which they are rendered.